

(FILE 'HOME' ENTERED AT 11:31:42 ON 22 NOV 2002)

FILE 'ADISALERTS, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, AQUASCI,
BIOBUSINESS, BIOCOMMERCE, BIOSIS, BIOTECHDS, BIOTECHNO, CABA, CANCERLIT,
CAPLUS, CEABA-VTB, CEN, CIN, CONFSCI, CROPB, CROPU, DGENE, DRUGB,
DRUGLAUNCH, DRUGMONOG2, DRUGNL, DRUGU, DRUGUPDATES, .' ENTERED AT
11:32:14 ON 22 NOV 2002

E BJORCK L/AU

E RASMUSSEN M/AU

L1

8 S E3

E BJORCK L/AU

L2 1073 S E3
L3 1080 S L1 OR L2
L4 475 S L3 AND (STREPTOCOCC?)
L5 168 S L4 AND (PYOGENES)
L6 58 DUP REM L5 (110 DUPLICATES REMOVED)

=> d bib ab 16

L6 ANSWER 1 OF 58 EMBAL COPYRIGHT 2002 ELSEVIER SCI. B.V.
AN 2002369035 EMBASE Alert (EMBAL)
TI **Streptococcus pyogenes** and phagocytic killing [2]
(multiple letters).
AU Von Pawel-Rammingen U.; Johansson B.P.; Tapper H.; **Bjorck L.**;
Lei B.; Deleo F.R.; Musser J.M.
CS U. Von Pawel-Rammingen, Department of Cell Biology, Section for Molecular
Pathogenesis, Lund University, Lund, Sweden. ulrich.von_pawel@medkem.lu.se
SO Nature Medicine, (1 Oct 2002) 8/10 (1044-1046).
CODEN: NAMEF ISSN: 1078-8956
CY United States
DT Letter
LA English

=> d 16 2-58

L6 ANSWER 2 OF 58 BIOTECHDS COPYRIGHT 2002 THOMSON DERWENT AND ISI
AN 2002-11891 BIOTECHDS
TI Identifying agent capable of blocking inhibitory effects of
proteinase/glycosaminoglycan pathway for enhancing antimicrobial activity
of cationic antimicrobial peptide, useful for treating bacterial
infection;
drug screening, alpha-defensin and bacterium culture for disease
therapy
AU **BJORCK L**; FRICK I; SCHMIDTCHEN A
PA HANSA MEDICAL AB
PI WO 2002006821 24 Jan 2002
AI WO 2000-EP8208 17 Jul 2000
PRAI EP 2000-306074 17 Jul 2000
DT Patent
LA English
OS WPI: 2002-257284 [30]

L6 ANSWER 3 OF 58 WPIDS (C) 2002 THOMSON DERWENT
AN 2002-257284 [30] WPIDS
DNN N2002-199196 DNC C2002-076536
TI Identifying agent capable of blocking inhibitory effects of
proteinase/glycosaminoglycan pathway for enhancing antimicrobial activity
of cationic antimicrobial peptide, useful for treating bacterial
infection.
DC A96 B04 D16 S03
IN **BJORCK, L**; FRICK, I; SCHMIDTCHEN, A
PA (HANS-N) HANSA MEDICAL AB
CYC 96
PI WO 2002006821 A2 20020124 (200230)* EN 46p G01N033-00
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ
NL OA PT SD SE SL SZ TR TZ UG ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK
DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR
KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU
SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
AU 2001087628 A 20020130 (200236) G01N033-00
ADT WO 2002006821 A2 WO 2001-EP8208 20010717; AU 2001087628 A AU 2001-87628
20010717

FDT AU 2001087628 A Based on WO 200206821
PRAI EP 2000-306074 20000717
IC ICM G01N033-00

L6 ANSWER 4 OF 58 BIOTECHNO COPYRIGHT 2002 Elsevier Science B.V.DUPLICATE
AN 2002:34907307 BIOTECHNO
TI The regulator PerR is involved in oxidative stress response and iron
homeostasis and is necessary for full virulence of **Streptococcus**
pyogenes
AU Ricci S.; Janulczyk R.; Bjorck L.
CS S. Ricci, Department of Molecular Biology, University of Siena, Ospedale
Le Scotte Piano 1S, Viale Bracci, 53100 Siena, Italy.
E-mail: riccisus@unisi.it
SO Infection and Immunity, (2002), 70/9 (4968-4976), 60 reference(s)
CODEN: INFIBR ISSN: 0019-9567
DT Journal; Article
CY United States
LA English
SL English

L6 ANSWER 5 OF 58 BIOTECHNO COPYRIGHT 2002 Elsevier Science B.V.DUPLICATE
AN 2002:34614617 BIOTECHNO
TI IdeS, a novel **streptococcal** cysteine proteinase with unique
specificity for immunoglobulin G
AU Von Pawel-Rammingen U.; Johansson B.P.; Bjorck L.
CS U. Von Pawel-Rammingen, Department of Molecular Biology, Section for
Molecular Pathogenesis, Lund University, SE-221 84 Lund, Sweden.
E-mail: Ulrich.von_Pawel@medkem.lu.se
SO EMBO Journal, (02 APR 2002), 21/7 (1607-1615), 61 reference(s)
CODEN: EMJODG ISSN: 0261-4189
DT Journal; Article
CY United Kingdom
LA English
SL English

L6 ANSWER 6 OF 58 MEDLINE
AN 2002653200 IN-PROCESS
DN 22300422 PubMed ID: 12411956
TI Erratum: **Streptococcus pyogenes** and phagocytic
killing.
AU Von Pawel-Rammingen U; Johansson B P; Tapper H; Bjorck L
SO NATURE MEDICINE, (2002 Nov) 8 (11) 1329.
Journal code: 9502015. ISSN: 1078-8956.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS IN-PROCESS; NONINDEXED; Priority Journals
ED Entered STN: 20021105
Last Updated on STN: 20021105

L6 ANSWER 7 OF 58 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.DUPLICATE 3
AN 2002369035 EMBASE
TI **Streptococcus pyogenes** and phagocytic killing [2]
(multiple letters).
AU Von Pawel-Rammingen U.; Johansson B.P.; Tapper H.; Bjorck L.;
Lei B.; Deleo F.R.; Musser J.M.
CS U. Von Pawel-Rammingen, Department of Cell Biology, Section for Molecular
Pathogenesis, Lund University, Lund, Sweden. ulrich.von_pawel@medkem.lu.se
SO Nature Medicine, (1 Oct 2002) 8/10 (1044-1046).
ISSN: 1078-8956 CODEN: NAMEFI
CY United States
DT Journal; Letter
FS 004 Microbiology

026 Immunology, Serology and Transplantation
 LA English

L6 ANSWER 8 OF 58 SCISEARCH COPYRIGHT 2002 ISI (R)
 AN 2002:819345 SCISEARCH
 GA The Genuine Article (R) Number: 599AN
 TI **Streptococcus pyogenes** and phagocytic killing
 AU von Pawel-Rammingen U (Reprint); Johansson B P; Tapper H; **Bjorck L**
 CS Lund Univ, Dept Cell & Mol Biol, Sect Mol Pathogenesis; Lund, Sweden
 (Reprint)
 CYA Sweden
 SO NATURE MEDICINE, (OCT 2002) Vol. 8, No. 10, pp. 1043-1044.
 Publisher: NATURE AMERICA INC, 345 PARK AVE SOUTH, NEW YORK, NY 10010-1707
 USA.
 ISSN: 1078-8956.
 DT Letter; Journal
 LA English
 REC Reference Count: 0

L6 ANSWER 9 OF 58 BIOTECHNO COPYRIGHT 2002 Elsevier Science B.V.DUPLICATE
 AN 2002:34535529 BIOTECHNO
 TI Uptake and intracellular transportation of a bacterial surface protein in
 lymphoid cells
 AU Frick I.-M.; Axcrone K.; Hardig Y.; Tapper H.; Gustafsson L.; Kellner R.;
 Leanderson T.; **Bjorck L.**
 CS I.-M. Frick, Department of Cell Biology, Lund University, BMC, Tornavagen
 10, S-221 84 Lund, Sweden.
 E-mail: Inga-Maria.Frick@medkem.lu.se
 SO Molecular Microbiology, (2002), 44/4 (917-934), 75 reference(s)
 CODEN: MOMIEE ISSN: 0950-382X
 DT Journal; Article
 CY United Kingdom
 LA English
 SL English

L6 ANSWER 10 OF 58 BIOTECHNO COPYRIGHT 2002 Elsevier Science B.V.DUPLICATE
 AN 2002:34597251 BIOTECHNO
 TI Proteolysis and its regulation at the surface of **Streptococcus**
pyogenes
 AU Rasmussen M.; **Bjorck L.**
 CS M. Rasmussen, Section for Molecular Pathogenesis, Department of Cell
 Biology, Lund University, Lund, Sweden.
 E-mail: magnus.rasmussen@medkem.lu.se
 SO Molecular Microbiology, (2002), 43/3 (537-544), 71 reference(s)
 CODEN: MOMIEE ISSN: 0950-382X
 DT Journal; (Short Survey)
 CY United Kingdom
 LA English
 SL English

L6 ANSWER 11 OF 58 BIOTECHNO COPYRIGHT 2002 Elsevier Science B.V.DUPLICATE
 AN 2002:35238020 BIOTECHNO
 TI Proteinases of common pathogenic bacteria degrade and inactivate the
 antibacterial peptide LL-37
 AU Schmidtchen A.; Frick I.-M.; Andersson E.; Tapper H.; **Bjorck L.**
 CS A. Schmidtchen, Section for Dermatology, Department of Medical
 Microbiology, Biomedical Center, Tornavagen 10, S-22184 Lund, Sweden.
 E-mail: artur.schmidtchen@derm.lu.se
 SO Molecular Microbiology, (2002), 46/1 (157-168), 49 reference(s)
 CODEN: MOMIEE ISSN: 0950-382X
 DT Journal; Article
 CY United Kingdom
 LA English

SL English

L6 ANSWER 12 OF 58 BIOTECHNO COPYRIGHT 2002 Elsevier Science B.V.DUPLICATE
AN 2001:32635310 BIOTECHNO
TI Unique regulation of SclB - A novel collagen-like surface protein of
Streptococcus pyogenes
AU Rasmussen M.; Bjorck L.
CS M. Rasmussen, Section for Molecular Pathogenesis, Department of Cell
Biology, Lund University, Tornavagen 10, S-221 84 Lund, Sweden.
E-mail: Magnus.Rasmussen@medkem.lu.se
SO Molecular Microbiology, (2001), 40/6 (1427-1438), 72 reference(s)
CODEN: MOMIEE ISSN: 0950-382X
DT Journal; Article
CY United Kingdom
LA English
SL English

L6 ANSWER 13 OF 58 BIOTECHNO COPYRIGHT 2002 Elsevier Science B.V.DUPLICATE
AN 2001:32162156 BIOTECHNO
TI Dermatan sulphate is released by proteinases of common pathogenic
bacteria and inactivates antibacterial .alpha.-defensin
AU Schmidtchen A.; Frick I.-M.; Bjorck L.
CS A. Schmidtchen, Section for Molecular Pathogenesis, Dept. of Cell and
Molecular Biology, Lund University, Tornavagen 10, Se-22184 Lund, Sweden.
E-mail: artur.schmidtchen@derm.lu.se
SO Molecular Microbiology, (2001), 39/3 (708-713), 36 reference(s)
CODEN: MOMIEE ISSN: 0950-382X
DT Journal; Article
CY United Kingdom
LA English
SL English

L6 ANSWER 14 OF 58 WPIDS (C) 2002 THOMSON DERWENT
AN 2000-365572 [31] WPIDS
DNC C2000-110434
TI New alpha2M binding protein for generating a protective immune response to
group A **streptococcus** and purifying the binding protein.
DC B04 D16
IN BJORCK, L H; RASMUSSEN, M; BJORCK, L; RASSMUSSEN, M
PA (ACTI-N) ACTINOVA LTD; (BJOR-I) BJORCK L; (RASS-I) RASSMUSSEN M
CYC 91
PI WO 2000026240 A2 20000511 (200031)* EN 67p C07K014-00
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL
OA PT SD SE SL SZ TZ UG ZW
W: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES
FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS
LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL
TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
AU 2000010572 A 20000522 (200040) C07K014-00
EP 1144442 A2 20011017 (200169) EN C07K014-00
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT
RO SE SI
US 2002061306 A1 20020523 (200239) A61K039-40
JP 2002528112 W 20020903 (200273) 77p C12N015-09
ADT WO 2000026240 A2 WO 1999-GB3631 19991102; AU 2000010572 A AU 2000-10572
19991102; EP 1144442 A2 EP 1999-954134 19991102, WO 1999-GB3631 19991102;
US 2002061306 A1 Cont of WO 1999-GB3631 19991102, US 2001-847539 20010501;
JP 2002528112 W WO 1999-GB3631 19991102, JP 2000-579627 19991102
FDT AU 2000010572 A Based on WO 200026240; EP 1144442 A2 Based on WO
200026240; JP 2002528112 W Based on WO 200026240
PRAI GB 1998-23975 19981102
IC ICM A61K039-40; C07K014-00; C12N015-09
ICS A61K039-09; A61K039-395; A61P031-04; C07H021-04; C07K014-315;

C07K016-12; C12N001-15; C12N001-19; C12N001-21; C12N005-10;
C12P021-02

- L6 ANSWER 15 OF 58 BIOTECHNO COPYRIGHT 2002 Elsevier Science B.V.DUPLICATE
AN 2000:30800310 BIOTECHNO
TI SclA, a novel collagen-like surface protein of **Streptococcus pyogenes**
AU Rasmussen M.; Eden A.; Bjorck L.
CS M. Rasmussen, Dept. of Cell and Molecular Biology, Section for Molecular Pathogenesis, Lund University, P.O. Box 94, S 221 00 Lund, Sweden.
E-mail: magnus.rasmussen@medkem.lu.se
SO Infection and Immunity, (2000), 68/11 (6370-6377), 61 reference(s)
CODEN: INFIBR ISSN: 0019-9567
DT Journal; Article
CY United States
LA English
SL English
- L6 ANSWER 16 OF 58 BIOTECHNO COPYRIGHT 2002 Elsevier Science B.V.DUPLICATE
AN 2000:30701249 BIOTECHNO
TI Virulent aggregates of **Streptococcus pyogenes** are generated by homophilic protein-protein interactions
AU Frick I.-M.; Morgelin M.; Bjorck L.
CS I.-M. Frick, Dept. of Cell and Molecular Biology, Sections for Molecular Pathogenesis, Lund University, PO Box 94, S-221 00 Lund, Sweden.
E-mail: inga-maria.frick@medkem.lu.se
SO Molecular Microbiology, (2000), 37/5 (1232-1247), 82 reference(s)
CODEN: MOMIEE ISSN: 0950-382X
DT Journal; Article
CY United Kingdom
LA English
SL English
- L6 ANSWER 17 OF 58 BIOTECHNO COPYRIGHT 2002 Elsevier Science B.V.DUPLICATE
AN 1999:29254894 BIOTECHNO
TI Protein GRAB of **Streptococcus pyogenes** regulates proteolysis at the bacterial surface by binding .alpha..sub.2-macroglobulin
AU Rasmussen M.; Muller H.-P.; Bjorck L.
CS L. Bjorck, Dept. of Cell and Molecular Biology, Section for Molecular Pathogenesis, Lund University, P.O. Box 94, S-221 00 Lund, Sweden.
E-mail: lars.bjorck@medkem.lu.se
SO Journal of Biological Chemistry, (1999), 274/22 (15336-15344), 48 reference(s)
CODEN: JBCHA3 ISSN: 0021-9258
DT Journal; Article
CY United States
LA English
SL English
- L6 ANSWER 18 OF 58 BIOTECHNO COPYRIGHT 2002 Elsevier Science B.V.DUPLICATE
AN 1999:29144387 BIOTECHNO
TI Protein H, an antiphagocytic surface protein in **Streptococcus pyogenes**
AU Kihlberg B.-M.; Collin M.; Olsen A.; Bjorck L.
CS B.-M. Kihlberg, Dept. of Cell and Molecular Biology, Umea University, S-901 87 Umea, Sweden.
E-mail: Britt-Marie.Kihlberg@cmb.umu.se
SO Infection and Immunity, (1999), 67/4 (1708-1714), 59 reference(s)
CODEN: INFIBR ISSN: 0019-9567
DT Journal; Article
CY United States
LA English

SL English

L6 ANSWER 19 OF 58 BIOTECHNO COPYRIGHT 2002 Elsevier Science B.V.DUPLICATE
 AN 1999:29507319 BIOTECHNO
 TI Identification and characterization of a **Streptococcus pyogenes** ABC transporter with multiple specificity for metal cations
 AU Janulczyk R.; Pallon J.; **Bjorck L.**
 CS L. Bjorck, Department of Cell Molecular Biology, Section for Molecular Pathogenesis, Lund University, PO Box 94, S-221 00 Lund, Sweden.
 E-mail: lars.bjorck@medkem.lu.se
 SO Molecular Microbiology, (1999), 34/3 (596-606), 53 reference(s)
 CODEN: MOMIEE ISSN: 0950-382X
 DT Journal; Article
 CY United Kingdom
 LA English
 SL English

L6 ANSWER 20 OF 58 BIOTECHNO COPYRIGHT 2002 Elsevier Science B.V.DUPLICATE
 AN 1998:28303153 BIOTECHNO
 TI Identification of an insertion sequence located in a region encoding virulence factors of **Streptococcus pyogenes**
 AU Berge A.; Rasmussen M.; **Bjorck L.**
 CS A. Berge, Dept. of Cell and Molecular Biology, Section for Molecular Pathogenesis, Lund University, P.O. Box 94, S-221 00 Lund, Sweden.
 E-mail: Andreas.Berge@medkem.lu.se
 SO Infection and Immunity, (1998), 66/7 (3449-3453), 35 reference(s)
 CODEN: INFIBR ISSN: 0019-9567
 DT Journal; Article
 CY United States
 LA English
 SL English

L6 ANSWER 21 OF 58 BIOTECHDS COPYRIGHT 2002 THOMSON DERWENT AND ISI
 AN 1997-06923 BIOTECHDS
 TI New **streptococcal** inhibitor of complement-mediated lysis, protein SIC and DNA;
 Streptococcus pyogenes recombinant protein SIC
 preparation by vector expression and purification by affinity chromatography, monoclonal antibody and DNA probe for use in vaccine and diagnosis
 AU Akesson P; **Bjorck L**
 PA Hightech-Receptor
 LO Malmo, Sweden.
 PI WO 9713786 17 Apr 1997
 AI WO 1996-SE1238 2 Oct 1996
 PRAI SE 1995-3495 9 Oct 1995
 DT Patent
 LA English
 OS WPI: 1997-235840 [21]

L6 ANSWER 22 OF 58 BIOTECHNO COPYRIGHT 2002 Elsevier Science B.V.DUPLICATE
 AN 1997:27355644 BIOTECHNO
 TI **Streptococcal** protein H forms soluble complement-activating complexes with IgG, but inhibits complement activation by IgG-coated targets
 AU Berge A.; Kihlberg B.-M.; Sjöholm A.G.; **Bjorck L.**
 CS A. Berge, Dept. of Cell and Molecular Biology, Section for Molecular Pathogenesis, Lund University, P.O. Box 94, S-221 00 Lund, Sweden.
 E-mail: andreas.berge@medkem.lu.se
 SO Journal of Biological Chemistry, (1997), 272/33 (20774-20781), 58 reference(s)
 CODEN: JBCHA3 ISSN: 0021-9258

DT Journal; Article
CY United States
LA English
SL English

L6 ANSWER 23 OF 58 BIOTECHNO COPYRIGHT 2002 Elsevier Science B.V.DUPLICATE
AN 1997:27438036 BIOTECHNO
TI Absorption of kininogen from human plasma by **Streptococcus pyogenes** is followed by the release of bradykinin
AU Ben Nasr A.; Herwald H.; Sjobring U.; Renne T.; Muller-Esterl W.; Bjorck L.
CS L. Bjorck, Department Cell Molecular Biology, Section for Molecular Pathogenesis, Lund University, PO Box 94, S-221 00 Lund, Sweden.
SO Biochemical Journal, (1997), 326/3 (657-660), 0 reference(s)
CODEN: BIJOAK ISSN: 0264-6021

DT Journal; Article
CY United Kingdom
LA English
SL English

L6 ANSWER 24 OF 58 SCISEARCH COPYRIGHT 2002 ISI (R)
AN 96:779464 SCISEARCH
GA The Genuine Article (R) Number: VP233
TI PROTEIN PAB, AN ALBUMIN-BINDING BACTERIAL SURFACE PROTEIN PROMOTING GROWTH AND VIRULENCE
AU DECHATEAU M (Reprint); HOLST E; BJORCK L
CS LUND UNIV, DEPT CELL & MOL BIOL, POB 94, S-22100 LUND, SWEDEN (Reprint); LUND UNIV, DEPT MED MICROBIOL, S-22100 LUND, SWEDEN
CYA SWEDEN
SO JOURNAL OF BIOLOGICAL CHEMISTRY, (25 OCT 1996) Vol. 271, No. 43, pp. 26609-26615.
ISSN: 0021-9258.
DT Article; Journal
FS LIFE
LA ENGLISH
REC Reference Count: 41
ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

L6 ANSWER 25 OF 58 BIOTECHNO COPYRIGHT 2002 Elsevier Science B.V.DUPLICATE
AN 1996:26034969 BIOTECHNO
TI Protein SIC, a novel extracellular protein of **Streptococcus pyogenes** interfering with complement function
AU Akesson P.; Sjöholm A.G.; Bjorck L.
CS Section for Molecular Pathogenesis, Dept. of Cell and Molecular Biology, Lund University, P.O. Box 94, S-221 00 Lund, Sweden.
SO Journal of Biological Chemistry, (1996), 271/2 (1081-1088)
CODEN: JBCHA3 ISSN: 0021-9258
DT Journal; Article
CY United States
LA English
SL English

L6 ANSWER 26 OF 58 BIOTECHNO COPYRIGHT 2002 Elsevier Science B.V.DUPLICATE
AN 1996:26198266 BIOTECHNO
TI Assembly of human contact phase proteins and release of bradykinin at the surface of curli-expressing Escherichia coli
AU Nasr A.B.; Olsen A.; Sjobring U.; Muller-Esterl W.; Bjorck L.
CS Section for Molecular Pathogenesis, Department of Cell/Molecular Biology, Lund University, Lund, Sweden.
SO Molecular Microbiology, (1996), 20/5 (927-935)
CODEN: MOMIEE ISSN: 0950-382X
DT Journal; Article
CY United Kingdom

LA English
SL English

L6 ANSWER 27 OF 58 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.DUPLICATE 20
AN 96297986 EMBASE
DN 1996297986

TI **Streptococcal** cysteine proteinase releases kinins: A novel virulence mechanism.

AU Herwald H.; Collin M.; Muller-Esterl W.; **Bjorck L.**

CS Section for Molecular Pathogenesis, Dept. of Cell and Molecular Biology, Lund University, P.O. Box 94, S-221 001 Lund, Sweden

SO Journal of Experimental Medicine, (1996) 184/2 (665-673).

ISSN: 0022-1007 CODEN: JEMEA V

CY United States

DT Journal; Article

FS 004 Microbiology

029 Clinical Biochemistry

LA English

SL English

L6 ANSWER 28 OF 58 BIOTECHNO COPYRIGHT 2002 Elsevier Science B.V.DUPLICATE
AN 1995:25326742 BIOTECHNO

TI Structure and stability of protein H and the M1 protein from **Streptococcus pyogenes**. Implications for other surface proteins of gram-positive bacteria

AU Nilsson B.H.K.; Frick I.-M.; Akeson P.; Forsen S.; **Bjorck L.**; Akerstrom B.; Wikstrom M.

CS Centre for Protein Engineering, MRC Center, Hills Road, Cambridge CB2 2QH, United Kingdom.

SO Biochemistry, (1995), 34/41 (13688-13698)

CODEN: BICHAW ISSN: 0006-2960

DT Journal; Article

CY United States

LA English

SL English

L6 ANSWER 29 OF 58 BIOTECHNO COPYRIGHT 2002 Elsevier Science B.V.DUPLICATE
AN 1995:25135523 BIOTECHNO

TI **Streptococcal** cysteine proteinase releases biologically active fragments of **streptococcal** surface proteins

AU Berge A.; **Bjorck L.**

CS Section for Molecular Pathogenesis, Dept. of Cell and Molecular Biology, Lund University, P.O. Box 94, S-221 00 Lund, Sweden.

SO Journal of Biological Chemistry, (1995), 270/17 (9862-9867)

CODEN: JBCHA3 ISSN: 0021-9258

DT Journal; Article

CY United States

LA English

SL English

L6 ~~ANSWER 30 OF 58~~ BIOTECHNO COPYRIGHT 2002 Elsevier Science B.V.DUPLICATE
AN 1995:25146124 BIOTECHNO

TI Protein H - A bacterial surface protein with affinity for both immunoglobulin and fibronectin type III domains

AU Frick I.-M.; Crossin K.L.; Edelman G.M.; **Bjorck L.**

CS Dept Medical Physiological Chemistry, Section for Molecular Pathogenesis, Lund University, PO Box 94, S-221 00 Lund, Sweden.

SO EMBO Journal, (1995), 14/8 (1674-1679)

CODEN: EMJODG ISSN: 0261-4189

DT Journal; Article

CY United Kingdom

LA English

SL English

L6 ANSWER 31 OF 58 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.DUPLICATE
24
AN 1995:454061 BIOSIS
DN PREV199598468361
TI Multiple ligand interactions for bacterial immunoglobulin-binding proteins
on human and murine cells of the hematopoietic lineage.
AU Axcrona, K. (1); Bjorck, L.; Leanderson, T.
CS (1) Immunol. Unit, Solvegatan 21, S-223 62 Lund Sweden
SO Scandinavian Journal of Immunology, (1995) Vol. 42, No. 3, pp. 359-367.
ISSN: 0300-9475.
DT Article
LA English

L6 ANSWER 32 OF 58 BIOTECHNO COPYRIGHT 2002 Elsevier Science B.V.DUPLICATE
AN 1995:26022897 BIOTECHNO
TI Biological properties of a **Streptococcus pyogenes**
mutant generated by Tn916 insertion in mga
AU Kihlberg B.-M.; Cooney J.; Caparon M.G.; Olsen A.; Bjorck L.
CS Dept. of Cell/Molecular Biology, Section for Molecular Pathogenesis, Lund
University, P.O. Box 94, S-221 00 Lund, Sweden.
SO Microbial Pathogenesis, (1995), 19/5 (299-315)
CODEN: MIPAEV ISSN: 0882-4010
DT Journal; Article
CY United Kingdom
LA English
SL English

L6 ANSWER 33 OF 58 BIOTECHNO COPYRIGHT 2002 Elsevier Science B.V.DUPLICATE
AN 1995:25021125 BIOTECHNO
TI Human kininogens interact with M protein, a bacterial surface protein and
virulence determinant
AU Ben Nasr A.; Herwaldt H.; Muller-Esterl W.; Bjorck L.
CS Medical and Physiological Chemistry, Lund University, PO Box 94, S-221 00
Lund, Sweden.
SO Biochemical Journal, (1995), 305/1 (173-180)
CODEN: BIJOAK ISSN: 0264-6021
DT Journal; Article
CY United Kingdom
LA English
SL English

L6 ANSWER 34 OF 58 BIOTECHNO COPYRIGHT 2002 Elsevier Science B.V.DUPLICATE
AN 1994:24180607 BIOTECHNO
TI M1 protein and protein H: IgG Fc- and albumin-binding
streptococcal surface proteins encoded by adjacent genes
AU Akesson P.; Schmidt K.-H.; Cooney J.; Bjorck L.
CS Dept Medical Physiological Chemistry, Lund University, Lund, Sweden.
SO Biochemical Journal, (1994), 300/3 (877-886)
CODEN: BIJOAK ISSN: 0264-6021
DT Journal; Article
CY United Kingdom
LA English
SL English

L6 ANSWER 35 OF 58 BIOTECHNO COPYRIGHT 2002 Elsevier Science B.V.DUPLICATE
AN 1994:24197452 BIOTECHNO
TI Protein H - A surface protein of **Streptococcus pyogenes**
with separate binding sites for IgG and albumin
AU Frick I.-M.; Akesson P.; Cooney J.; Sjobring U.; Schmidt K.-H.; Gomi H.;
Hattori S.; Tagawa C.; Kishimoto F.; Bjorck L.
CS Med./Physiological Chemistry Dept., Lund University, Lund, Sweden.
SO Molecular Microbiology, (1994), 12/1 (143-151)

CODEN: MOMIEE ISSN: 0950-382X
DT Journal; Article
CY United Kingdom
LA English
SL English

L6 ANSWER 36 OF 58 MEDLINE
AN 92251189 MEDLINE
DN 92251189 PubMed ID: 1578147
TI Protein Arp and protein H from group A **streptococci**. Ig binding and dimerization are regulated by temperature.
AU Akerstrom B; Lindahl G; **Bjorck L**; Lindqvist A
CS Department of Medical and Physiological Chemistry, University of Lund, Sweden.
SO JOURNAL OF IMMUNOLOGY, (1992 May 15) 148 (10) 3238-43.
Journal code: 2985117R. ISSN: 0022-1767.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Abridged Index Medicus Journals; Priority Journals
EM 199206
ED Entered STN: 19920619
Last Updated on STN: 19920619
Entered Medline: 19920609

L6 ANSWER 37 OF 58 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
AN 1992:340904 BIOSIS
DN BR43:30454
TI ISOLATION FROM **STREPTOCOCCUS-PYOGENES** OF EXTRACELLULAR M1 PROTEIN WHICH BINDS TO FIBRINOGEN ALBUMIN AND IGG.
AU SCHMIDT K-H; AKESSON P; KOEHLER W; **BJORCK L**
CS CENTRAL INST. MICROBIOL. EXP. THERAPY, JENA, GER.
SO OREFICI, G. (ED.). ZENTRALBLATT FUER BAKTERIOLOGIE SUPPLEMENT, 22. NEW PERSPECTIVES ON STREPTOCOCCI AND STREPTOCOCCAL INFECTIONS; (INTERNATIONAL JOURNAL OF MEDICAL MICROBIOLOGY, 22. NEW PERSPECTIVES ON STREPTOCOCCI AND STREPTOCOCCAL INFECTIONS); XI LANCEFIELD INTERNATIONAL SYMPOSIUM ON STREPTOCOCCI AND STREPTOCOCCAL DISEASES, SIENA, ITALY, SEPTEMBER 10-14, 1990. XIX+569P. GUSTAV FISCHER VERLAG: STUTTGART, GERMANY; NEW YORK, NEW YORK, USA. ILLUS. (1992) 0 (0), 206-207.
CODEN: ZBASE2. ISBN: 3-437-11362-3, 1-56081-333-4.
DT Conference
FS BR; OLD
LA English

L6 ANSWER 38 OF 58 MEDLINE
AN 90340319 MEDLINE
DN 90340319 PubMed ID: 2199820
TI Protein H--a novel IgG binding bacterial protein.
AU Akesson P; Cooney J; Kishimoto F; **Bjorck L**
CS Department of Medical and Physiological Chemistry, University of Lund, Sweden.
SO MOLECULAR IMMUNOLOGY, (1990 Jun) 27 (6) 523-31.
Journal code: 7905289. ISSN: 0161-5890.
CY ENGLAND: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199009
ED Entered STN: 19901012
Last Updated on STN: 19901012
Entered Medline: 19900907

L6 ANSWER 39 OF 58 MEDLINE

AN 89097314 MEDLINE
 DN 89097314 PubMed ID: 2643059
 TI Bacterial growth blocked by a synthetic peptide based on the structure of a human proteinase inhibitor.
 AU Bjorck L; Akesson P; Bohus M; Trojnar J; Abrahamson M; Olafsson I; Grubb A
 CS Department of Medical Microbiology, University of Lund, Sweden.
 SO NATURE, (1989 Jan 26) 337 (6205) 385-6.
 Journal code: 0410462. ISSN: 0028-0836.
 CY ENGLAND: United Kingdom
 DT Journal; Article; (JOURNAL ARTICLE)
 LA English
 FS Priority Journals
 EM 198902
 ED Entered STN: 19900308
 Last Updated on STN: 19900308
 Entered Medline: 19890221

L6 ANSWER 40 OF 58 MEDLINE
 AN 86264641 MEDLINE
 DN 86264641 PubMed ID: 3088909
 TI Related bindings of aggregated beta 2-microglobulin, IgG Fab, kappa and lambda light chains to group A **streptococci**.
 AU Persson M H; Schalen C; Berggard B; Logdberg L; Bjorck L
 SO ACTA PATHOLOGICA, MICROBIOLOGICA, ET IMMUNOLOGICA SCANDINAVICA. SECTION B, MICROBIOLOGY, (1986 Feb) 94 (1) 25-31.
 Journal code: 8206623. ISSN: 0108-0180.
 CY Denmark
 DT Journal; Article; (JOURNAL ARTICLE)
 LA English
 FS Priority Journals
 EM 198608
 ED Entered STN: 19900321
 Last Updated on STN: 19900321
 Entered Medline: 19860801

L6 ANSWER 41 OF 58 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.DUPLICATE 29
 AN 84172581 EMBASE
 DN 1984172581
 TI On the interaction between .beta.2-microglobulin and group A **streptococci**.
 AU Bjorck L.; Miorner H.; Kuhnemund O.; et al.
 CS Department of Medical Microbiology, University of Lund, Lund, Sweden
 SO Scandinavian Journal of Immunology, (1984) 20/1 (69-79).
 CODEN: SJIMAX
 CY Norway
 DT Journal
 FS 004 Microbiology
 026 Immunology, Serology and Transplantation
 005 General Pathology and Pathological Anatomy
 LA English

L6 ANSWER 42 OF 58 MEDLINE
 AN 84175251 MEDLINE
 DN 84175251 PubMed ID: 6369874
 TI The genetic control of virulence in group A **streptococci**. III. Plasmid-induced "switch-off"--effect on some pathogenic properties.
 AU Ravdonikas L E; Christensen P; Burova L A; Grabovskaya K; Bjorck L ; Schalen C; Svensson M L; Totolian A A
 SO ACTA PATHOLOGICA, MICROBIOLOGICA, ET IMMUNOLOGICA SCANDINAVICA. SECTION B, MICROBIOLOGY, (1984 Feb) 92 (1) 65-9.
 Journal code: 8206623. ISSN: 0108-0180.
 CY Denmark

DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 198405
ED Entered STN: 19900319
Last Updated on STN: 19900319
Entered Medline: 19840524

L6 ANSWER 43 OF 58 MEDLINE
AN 84006973 MEDLINE
DN 84006973 PubMed ID: 6352498
TI Electron microscopic localization of receptors for aggregated beta 2-microglobulin on the surface of beta-hemolytic **streptococci**.
AU Wagner M; Wagner B; Kronvall G; **Bjorck L**
SO INFECTION AND IMMUNITY, (1983 Oct) 42 (1) 326-32.
Journal code: 0246127. ISSN: 0019-9567.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 198311
ED Entered STN: 19900319
Last Updated on STN: 19900319
Entered Medline: 19831123

L6 ANSWER 44 OF 58 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.DUPLICATE 30
AN 81115471 EMBASE
DN 1981115471
TI .beta.2-Microglobulin is bound to **streptococcal** M protein.
AU **Bjorck L.**; Tylewska S.K.; Wadstrom T.; Kronvall G.
CS Dept. Physiol. Chem., Univ. Lund, S-220 07 Lund 7, Sweden
SO Scandinavian Journal of Immunology, (1981) 13/4 (391-394).
CODEN: SJIMAX
CY Norway
DT Journal
FS 026 Immunology, Serology and Transplantation
004 Microbiology
LA English

L6 ANSWER 45 OF 58 MEDLINE
AN 79087773 MEDLINE
DN 79087773 PubMed ID: 83295
TI Binding of aggregated human beta2-microglobulin to surface protein structure in group A, C, and G **streptococci**.
AU Kronvall G; Myhre E B; **Bjorck L**; Berggard I
SO INFECTION AND IMMUNITY, (1978 Oct) 22 (1) 136-42.
Journal code: 0246127. ISSN: 0019-9567.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 197903
ED Entered STN: 19900315
Last Updated on STN: 19900315
Entered Medline: 19790313

L6 ANSWER 46 OF 58 DGENE (C) 2002 THOMSON DERWENT
AN AAW16476 Protein DGENE
TI Protein designated **streptococcal** inhibitor of complement mediated lysis - useful for detecting, and vaccinating against **Streptococcus** infection
IN Akesson P; **Bjorck L**
PA (HIGH-N) HIGHTECH RECEPTOR AB.

PI WO 9713786 A1 19970417 63p
 AI WO 1996-SE1238 19961002
 PRAI SE 1995-3495 19951009
 DT Patent
 LA English
 OS 1997-235840 [21]

L6 ANSWER 47 OF 58 DGENE (C) 2002 THOMSON DERWENT
 AN AAW16478 Protein DGENE
 TI Protein designated **streptococcal** inhibitor of complement mediated lysis - useful for detecting, and vaccinating against **Streptococcus** infection
 IN Akesson P; Bjorck L
 PA (HIGH-N) HIGHTECH RECEPTOR AB.
 PI WO 9713786 A1 19970417 63p
 AI WO 1996-SE1238 19961002
 PRAI SE 1995-3495 19951009
 DT Patent
 LA English
 OS 1997-235840 [21]

L6 ANSWER 48 OF 58 DGENE (C) 2002 THOMSON DERWENT
 AN AAW16477 Protein DGENE
 TI Protein designated **streptococcal** inhibitor of complement mediated lysis - useful for detecting, and vaccinating against **Streptococcus** infection
 IN Akesson P; Bjorck L
 PA (HIGH-N) HIGHTECH RECEPTOR AB.
 PI WO 9713786 A1 19970417 63p
 AI WO 1996-SE1238 19961002
 PRAI SE 1995-3495 19951009
 DT Patent
 LA English
 OS 1997-235840 [21]

L6 ANSWER 49 OF 58 DGENE (C) 2002 THOMSON DERWENT
 AN AAW16475 Peptide DGENE
 TI Protein designated **streptococcal** inhibitor of complement mediated lysis - useful for detecting, and vaccinating against **Streptococcus** infection
 IN Akesson P; Bjorck L
 PA (HIGH-N) HIGHTECH RECEPTOR AB.
 PI WO 9713786 A1 19970417 63p
 AI WO 1996-SE1238 19961002
 PRAI SE 1995-3495 19951009
 DT Patent
 LA English
 OS 1997-235840 [21]

L6 ANSWER 50 OF 58 DGENE (C) 2002 THOMSON DERWENT
 AN AAW16474 Peptide DGENE
 TI Protein designated **streptococcal** inhibitor of complement mediated lysis - useful for detecting, and vaccinating against **Streptococcus** infection
 IN Akesson P; Bjorck L
 PA (HIGH-N) HIGHTECH RECEPTOR AB.
 PI WO 9713786 A1 19970417 63p
 AI WO 1996-SE1238 19961002
 PRAI SE 1995-3495 19951009
 DT Patent
 LA English
 OS 1997-235840 [21]

L6 ANSWER 51 OF 58 DGENE (C) 2002 THOMSON DERWENT
 AN AAW16473 Peptide DGENE
 TI Protein designated **streptococcal** inhibitor of complement
 mediated lysis - useful for detecting, and vaccinating against
Streptococcus infection
 IN Akesson P; Bjorck L
 PA (HIGH-N) HIGHTECH RECEPTOR AB.
 PI WO 9713786 A1 19970417 63p
 AI WO 1996-SE1238 19961002
 PRAI SE 1995-3495 19951009
 DT Patent
 LA English
 OS 1997-235840 [21]

L6 ANSWER 52 OF 58 DGENE (C) 2002 THOMSON DERWENT
 AN AAW16472 Peptide DGENE
 TI Protein designated **streptococcal** inhibitor of complement
 mediated lysis - useful for detecting, and vaccinating against
Streptococcus infection
 IN Akesson P; Bjorck L
 PA (HIGH-N) HIGHTECH RECEPTOR AB.
 PI WO 9713786 A1 19970417 63p
 AI WO 1996-SE1238 19961002
 PRAI SE 1995-3495 19951009
 DT Patent
 LA English
 OS 1997-235840 [21]

L6 ANSWER 53 OF 58 DGENE (C) 2002 THOMSON DERWENT
 AN AAW16471 Peptide DGENE
 TI Protein designated **streptococcal** inhibitor of complement
 mediated lysis - useful for detecting, and vaccinating against
Streptococcus infection
 IN Akesson P; Bjorck L
 PA (HIGH-N) HIGHTECH RECEPTOR AB.
 PI WO 9713786 A1 19970417 63p
 AI WO 1996-SE1238 19961002
 PRAI SE 1995-3495 19951009
 DT Patent
 LA English
 OS 1997-235840 [21]

L6 ANSWER 54 OF 58 DGENE (C) 2002 THOMSON DERWENT
 AN AAW16470 Peptide DGENE
 TI Protein designated **streptococcal** inhibitor of complement
 mediated lysis - useful for detecting, and vaccinating against
Streptococcus infection
 IN Akesson P; Bjorck L
 PA (HIGH-N) HIGHTECH RECEPTOR AB.
 PI WO 9713786 A1 19970417 63p
 AI WO 1996-SE1238 19961002
 PRAI SE 1995-3495 19951009
 DT Patent
 LA English
 OS 1997-235840 [21]

L6 ANSWER 55 OF 58 DGENE (C) 2002 THOMSON DERWENT
 AN AAT66503 DNA DGENE
 TI Protein designated **streptococcal** inhibitor of complement
 mediated lysis - useful for detecting, and vaccinating against
Streptococcus infection
 IN Akesson P; Bjorck L
 PA (HIGH-N) HIGHTECH RECEPTOR AB.

PI WO 9713786 A1 19970417 63p
 AI WO 1996-SE1238 19961002
 PRAI SE 1995-3495 19951009
 DT Patent
 LA English
 OS 1997-235840 [21]

L6 ANSWER 56 OF 58 DGENE (C) 2002 THOMSON DERWENT
 AN AAT13864 DNA DGENE
 TI Protein designated **streptococcal** inhibitor of complement mediated lysis - useful for detecting, and vaccinating against **Streptococcus** infection
 IN Akesson P; Bjorck L
 PA (HIGH-N) HIGHTECH RECEPTOR AB.
 PI WO 9713786 A1 19970417 63p
 AI WO 1996-SE1238 19961002
 PRAI SE 1995-3495 19951009
 DT Patent
 LA English
 OS 1997-235840 [21]

L6 ANSWER 57 OF 58 DGENE (C) 2002 THOMSON DERWENT
 AN AAT66502 DNA DGENE
 TI Protein designated **streptococcal** inhibitor of complement mediated lysis - useful for detecting, and vaccinating against **Streptococcus** infection
 IN Akesson P; Bjorck L
 PA (HIGH-N) HIGHTECH RECEPTOR AB.
 PI WO 9713786 A1 19970417 63p
 AI WO 1996-SE1238 19961002
 PRAI SE 1995-3495 19951009
 DT Patent
 LA English
 OS 1997-235840 [21]

L6 ANSWER 58 OF 58 DGENE (C) 2002 THOMSON DERWENT
 AN AAT66501 DNA DGENE
 TI Protein designated **streptococcal** inhibitor of complement mediated lysis - useful for detecting, and vaccinating against **Streptococcus** infection
 IN Akesson P; Bjorck L
 PA (HIGH-N) HIGHTECH RECEPTOR AB.
 PI WO 9713786 A1 19970417 63p
 AI WO 1996-SE1238 19961002
 PRAI SE 1995-3495 19951009
 DT Patent
 LA English
 OS 1997-235840 [21]

=> s group a streptococcus

11 FILES SEARCHED...
 19 FILES SEARCHED...
 21 FILES SEARCHED...
 30 FILES SEARCHED...
 39 FILES SEARCHED...
 45 FILES SEARCHED...
 47 FILES SEARCHED...
 55 FILES SEARCHED...
 56 FILES SEARCHED...

L7 20110 GROUP A STREPTOCOCCUS

=> s 11 and (pyrogenes)

46 FILES SEARCHED...
L8 0 L1 AND (PYROGENES)

=> s l1 and (surface protein)
13 FILES SEARCHED...
20 FILES SEARCHED...
29 FILES SEARCHED...
41 FILES SEARCHED...
54 FILES SEARCHED...
L9 0 L1 AND (SURFACE PROTEIN)

=> l7 and (alpha zm binding protein)
L7 IS NOT A RECOGNIZED COMMAND
The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (=>).

=> s l7 and (alpha zm binding protein)
11 FILES SEARCHED...
19 FILES SEARCHED...
22 FILES SEARCHED...
33 FILES SEARCHED...
43 FILES SEARCHED...
55 FILES SEARCHED...
L10 2 L7 AND (ALPHA ZM BINDING PROTEIN)

=> d l10 1-2

L10 ANSWER 1 OF 2 IFIPAT COPYRIGHT 2002 IFI
AN 10117699 IFIPAT;IFIUDB;IFICDB
TI STREPTOCOCCAL ALPHA ZM BINDING
PROTEIN
IN Bjorck Lars (SE); Rassmussen Magnus (SE)
PA Unassigned Or Assigned To Individual (68000)
PI US 2002061306 A1 20020523
AI US 2001-847539 20010501
PRAI GB 1998-239759 19981102
FI US 2002061306 20020523
DT Utility; Patent Application - First Publication
FS CHEMICAL
APPLICATION
CLMN 22
GI 11 Figure(s).

FIG. 1. The binding of radiolabeled alpha 2M to 109 bacteria of different strains of *S. pyogenes* grown to early stationary phase is presented in A (bars represent +SEM, n=3). In B the binding of radiolabeled alpha 2M to 2 x 10⁸ KTL3 bacteria was competed with alpha 2M and with protein G (+/-SD, n=3). In C the scatchard plot for the reaction between alpha 2M and 109 KTL3 bacteria is shown. The shape of the plot suggests two binding sites with different affinities (K_a=2.0 x 10⁸M⁻¹ and 5.3 x 10⁶M⁻¹ respectively).

FIG. 2. A schematic comparison between protein GRAB and protein G is shown in A. The complete nucleotide and amino acid sequence of grab/protein GRAB is shown in B.

FIG. 3. Different strains of *S. pyogenes* were subjected to PCR and the results are set out in (A). From all strains, except from the AP9 strain, a product of between 500 and 850 bp in size could be amplified (A). Schematic comparison of the mature protein GRAB (amino acids 34-188 in FIG. 2B) encoded by these strains is shown in B.

FIG. 4. MBP-GRAB was used to inhibit the binding of radiolabeled alpha 2M to 2 x 10⁸ KTL3 bacteria. Similarly one synthetic peptide (aa 34-56 in FIG. 2B) was able to compete for the binding of alpha 2M although less efficiency than MBP-GRAB, while an overlapping peptide (aa 51-68 in FIG.

2B) did not compete for the binding. Bars represent \pm SD, n=3.

FIG. 5. An internal fragment of grab, lacking the part of the gene coding for the cell wall attachment, was cloned into the streptococcal suicide plasmid pFW13 to generate FW-grab. pFWgrab was transformed into KTL3 bacteria, to generate MR4. MR4 was completely devoid of alpha 2M binding as shown (\pm SD, n=3).

FIG. 6. The binding of the radiolabeled fibrinogen was measured after trypsin treatment of KTL3 or MR4 bacteria. Some bacteria were preincubated with alpha 2M (+ alpha 2M) and some were not. As can be seen, preincubation of KTL3 with alpha 2M protected the M protein, and thus fibrinogen binding, from trypsin degradation. alpha 2M pretreatment of MR4 did not affect the fibrinogen binding (\pm SD n=3).

FIG. 7. Radiolabeled and activated SCP was added to KTL3 (1), MR4 (3), or the same bacteria preincubated with alpha 2M (2 and 4 respectively). The binding of SCP was significantly higher to KTL3 bacteria that had been preincubated with alpha 2M (\pm SD, n=3).

FIG. 8. Shows the results of an assay of sheep anti-DSP 18. peptide sera on a GRAB coated plate.

FIG. 9. Shows the results of ELISA using

FIG. 10. Shows the serum antibody response in mice immunised with a protein or peptide of the invention.

FIG. 11. Shows the results of opsonization of log phase **group A streptococcus** by sera to a protein or peptide of the invention.

L10 ANSWER 2 OF 2 USPTFULL
 AN 2002:119326 USPTFULL
 TI Streptococcal **alpha 2M binding**
protein
 IN Bjorck, Lars, Lund, SWEDEN
 Rassmussen, Magnus, Lund, SWEDEN
 PI US 2002061306 A1 20020523
 AI US 2001-847539 A1 20010501 (9)
 RLI Continuation of Ser. No. WO 1999-GB3631, filed on 2 Nov 1999, UNKNOWN
 PRAI GB 1998-23975 19981102
 DT Utility
 FS APPLICATION
 LN.CNT 1925
 INCL INCLM: 424/150.100
 INCLS: 530/388.400; 536/023.530; 435/069.100
 NCL NCLM: 424/150.100
 NCLS: 530/388.400; 536/023.530; 435/069.100
 IC [7]
 ICM: A61K039-40
 ICS: C07K016-12; C07H021-04; C12P021-02
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> s 17 and (surface proteins)
 21 FILES SEARCHED...
 41 FILES SEARCHED...
 56 FILES SEARCHED...
 L11 270 L7 AND (SURFACE PROTEINS)

=> s 111 and (protein g)
 13 FILES SEARCHED...
 21 FILES SEARCHED...
 35 FILES SEARCHED...
 47 FILES SEARCHED...
 L12 13 L11 AND (PROTEIN G)

=> dup rem
 ENTER L# LIST OR (END):112
 DUPLICATE IS NOT AVAILABLE IN 'ADISINSIGHT', ADISNEWS, BIOCOMMERCE, DGENE,

DRUGLAUNCH, DRUGMONOG2, DRUGUPDATES, FEDRIP, FOREGE, GENBANK, KOSMET,
MEDICONF, PHAR, PHARMAML, SYNTHLINE'.

ANSWERS FROM THESE FILES WILL BE CONSIDERED UNIQUE
PROCESSING COMPLETED FOR L12

L13 13 DUP REM L12 (0 DUPLICATES REMOVED)

=> d his

(FILE 'HOME' ENTERED AT 11:31:42 ON 22 NOV 2002)

FILE 'ADISALERTS, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, AQUASCI,
BIOBUSINESS, BIOCERCE, BIOSIS, BIOTECHDS, BIOTECHNO, CABA, CANCERLIT,
CAPLUS, CEABA-VTB, CEN, CIN, CONFSCI, CROPB, CROPU, DGENE, DRUGB,
DRUGLAUNCH, DRUGMONOG2, DRUGNL, DRUGU, DRUGUPDATES, .' ENTERED AT
11:32:14 ON 22 NOV 2002

E BJORCK L/AU

E RASMUSSEN M/AU

L1 8 S E3

E BJORCK L/AU

L2 1073 S E3

L3 1080 S L1 OR L2

L4 475 S L3 AND (STREPTOCOCC?)

L5 168 S L4 AND (PYOGENES)

L6 58 DUP REM L5 (110 DUPLICATES REMOVED)

L7 20110 S GROUP A STREPTOCOCCUS

L8 0 S L1 AND (PYROGENES)

L9 0 S L1 AND (SURFACE PROTEIN)

L10 2 S L7 AND (ALPHA ZM BINDING PROTEIN)

L11 270 S L7 AND (SURFACE PROTEINS)

L12 13 S L11 AND (PROTEIN G)

L13 13 DUP REM L12 (0 DUPLICATES REMOVED)

=> d bib ab

L13 ANSWER 1 OF 13 USPATFULL

AN 2002:272801 USPATFULL

TI Compositions and methods for the therapy and diagnosis of colon cancer

IN Stolk, John A., Bothell, WA, UNITED STATES

Xu, Jiangchun, Bellevue, WA, UNITED STATES

Chenault, Ruth A., Seattle, WA, UNITED STATES

Meagher, Madeleine Joy, Seattle, WA, UNITED STATES

PA Corixa Corporation, Seattle, WA, UNITED STATES, 98104 (U.S. corporation)

PI US 2002150922 A1 20021017

AI US 2001-998598 A1 20011116 (9)

PRAI US 2001-304037P 20010710 (60)

US 2001-279670P 20010328 (60)

US 2001-267011P 20010206 (60)

US 2000-252222P 20001120 (60)

DT Utility

FS APPLICATION

LREP SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300,
SEATTLE, WA, 98104-7092

CLMN Number of Claims: 17

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 9233

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compositions and methods for the therapy and diagnosis of cancer,
particularly colon cancer, are disclosed. Illustrative compositions
comprise one or more colon tumor polypeptides, immunogenic portions
thereof, polynucleotides that encode such polypeptides, antigen
presenting cell that expresses such polypeptides, and T cells that are
specific for cells expressing such polypeptides. The disclosed

compositions are useful, for example, in the diagnosis, prevention and/or treatment of diseases, particularly colon cancer.

=> d bib ab 2-13

L13 ANSWER 2 OF 13 USPATFULL
AN 2002:243051 USPATFULL
TI Compositions and methods for the therapy and diagnosis of ovarian cancer
IN Algate, Paul A., Issaquah, WA, UNITED STATES
Jones, Robert, Seattle, WA, UNITED STATES
Harlocker, Susan L., Seattle, WA, UNITED STATES
PA Corixa Corporation, Seattle, WA, UNITED STATES, 98104 (U.S. corporation)
PI US 2002132237 A1 20020919
AI US 2001-867701 A1 20010529 (9)
PRAI US 2000-207484P 20000526 (60)
DT Utility
FS APPLICATION
LREP SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300,
SEATTLE, WA, 98104-7092
CLMN Number of Claims: 11
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 25718
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Compositions and methods for the therapy and diagnosis of cancer, particularly ovarian cancer, are disclosed. Illustrative compositions comprise one or more ovarian tumor polypeptides, immunogenic portions thereof, polynucleotides that encode such polypeptides, antigen presenting cell that expresses such polypeptides, and T cells that are specific for cells expressing such polypeptides. The disclosed compositions are useful, for example, in the diagnosis, prevention and/or treatment of diseases, particularly ovarian cancer.

L13 ANSWER 3 OF 13 USPATFULL
AN 2002:164409 USPATFULL
TI Streptococcal streptolysin S vaccines
IN Dale, James B., Memphis, TN, UNITED STATES
PA University of Tennessee Research Corporation, Knoxville, TN, 37996-1527 (U.S. corporation)
PI US 2002086023 A1 20020704
AI US 2001-975455 A1 20011010 (9)
PRAI US 2000-239432P 20001010 (60)
DT Utility
FS APPLICATION
LREP SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300,
SEATTLE, WA, 98104-7092
CLMN Number of Claims: 53
ECL Exemplary Claim: 1
DRWN 1 Drawing Page(s)
LN.CNT 2684
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Provided are streptolysin S (SLS) polypeptides, peptides, and variants thereof, antibodies directed thereto, and isolated nucleic acids encoding such proteins. In one embodiment, a method is provided wherein a synthetic peptide of SLS is used to elicit an immune response specific for SLS in a subject to treat or prevent a streptococcal infection. In other embodiments, antibodies that neutralize the hemolytic activity of the SLS toxin may be used as a vaccinating agent.

L13 ANSWER 4 OF 13 USPATFULL
AN 2002:157785 USPATFULL
TI Opsonic and protective monoclonal and chimeric antibodies specific for

lipoteichoic acid of gram positive bacteria
IN Fischer, Gerald W., Bethesda, MD, UNITED STATES
Schuman, Richard F., Gaithersburg, MD, UNITED STATES
Wong, Hing, Weston, FL, UNITED STATES
Stinson, Jeffrey R., Davie, FL, UNITED STATES
PA Sunol Molecular Corporation (U.S. corporation)
PI US 2002082395 A1 20020627
AI US 2001-893615 A1 20010629 (9)
RLI Division of Ser. No. US 1998-97055, filed on 15 Jun 1998, PENDING
PRAI US 1997-49871P 19970616 (60)
DT Utility
FS APPLICATION
LREP FINNEGAN, HENDERSON, FARABOW, GARRETT &, DUNNER LLP, 1300 I STREET, NW,
WASHINGTON, DC, 20005
CLMN Number of Claims: 31
ECL Exemplary Claim: 1
DRWN 22 Drawing Page(s)
LN.CNT 2428

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention encompasses monoclonal and chimeric antibodies that bind to lipoteichoic acid of Gram positive bacteria. The antibodies also bind to whole bacteria and enhance phagocytosis and killing of the bacteria in vitro and enhance protection from lethal infection in vivo. The mouse monoclonal antibody has been humanized and the resulting chimeric antibody provides a previously unknown means to diagnose, prevent and/or treat infections caused by gram positive bacteria bearing lipoteichoic acid. This invention also encompasses a peptide mimic of the lipoteichoic acid epitope binding site defined by the monoclonal antibody. This epitope or epitope peptide mimic identifies other antibodies that may bind to the lipoteichoic acid epitope. Moreover, the epitope or epitope peptide mimic provides a valuable substrate for the generation of vaccines or other therapeutics.

L13 ANSWER 5 OF 13 USPATFULL
AN 2002:119326 USPATFULL
TI Streptococcal alpha ZM binding protein
IN Bjorck, Lars, Lund, SWEDEN
Rasmussen, Magnus, Lund, SWEDEN
PI US 2002061306 A1 20020523
AI US 2001-847539 A1 20010501 (9)
RLI Continuation of Ser. No. WO 1999-GB3631, filed on 2 Nov 1999, UNKNOWN
PRAI GB 1998-23975 19981102
DT Utility
FS APPLICATION
LREP SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300,
SEATTLE, WA, 98104-7092
CLMN Number of Claims: 22
ECL Exemplary Claim: 1
DRWN 9 Drawing Page(s)
LN.CNT 1925

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A protein is described which is capable of binding to .alpha..sub.2 macro globulin. The protein comprises the amino acid sequence of SEQ ID No: 1 or a functional variant thereof. The invention also relates to a peptide comprising a fragment of the protein of at least six amino acids in length. A protein or peptide which is capable of generating a protective immune response to **Group A streptococcus** comprises the amino acid sequence of SEQ ID No: 1, a functional variant thereof or a functional variant of at least six amino acids in length of either thereof. Such a protein or peptide may be used in a vaccine composition together with a pharmaceutically acceptable carrier.

L13 ANSWER 6 OF 13 USPATFULL

AN 2002:174798 USPATFULL
TI Antigen of hybrid M protein and carrier for Group A streptococcal vaccine
IN Dale, James B., Memphis, TN, United States
PA University of Tennessee Research Corporation, Knoxville, TN, United States (U.S. corporation)
PI US 6419932 B1 20020716
AI US 1997-914479 19970819 (8)
RLI Continuation of Ser. No. US 1995-409270, filed on 23 Mar 1995, now abandoned Continuation of Ser. No. US 1992-945860, filed on 16 Sep 1992, now abandoned
DT Utility
FS GRANTED
EXNAM Primary Examiner: Smith, Lynette R. F.; Assistant Examiner: Baskar, Padma
LREP Seed Intellectual Property Law Group PLLC
CLMN Number of Claims: 22
ECL Exemplary Claim: 1
DRWN 7 Drawing Figure(s); 7 Drawing Page(s)
LN.CNT 1494

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Recombinant hybrid streptococcal M protein antigens are provided which elicit protective antibodies against Group A streptococci and prevent rheumatic fever. Recombinant hybrid genes which encode the antigen are provided. Vaccine compositions and methods of administering the compositions are provided to elicit immunity against Group A streptococci.

L13 ANSWER 7 OF 13 USPATFULL

AN 2002:50826 USPATFULL
TI Fibrinectin and fibrinogen binding protein from group A streptococci
IN Fischetti, Vincent A., West Hempstead, NY, United States
Rocha, Claudia, New York, NY, United States
PA The Rockefeller University, New York, NY, United States (U.S. corporation)
PI US 6355477 B1 20020312
AI US 1999-327536 19990608 (9)
RLI Continuation-in-part of Ser. No. US 1996-714402, filed on 16 Sep 1996, now patented, Pat. No. US 5910441
DT Utility
FS GRANTED
EXNAM Primary Examiner: Navarro, Mark
LREP Burns, Doane, Swecker & Mathis, L.L.P.
CLMN Number of Claims: 11
ECL Exemplary Claim: 1
DRWN 6 Drawing Figure(s); 6 Drawing Page(s)
LN.CNT 1136

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention relates to a novel fibrinogen and fibronectin binding protein from group A streptococci, and the DNA encoding the protein. The protein and its DNA are useful in the preparation of compositions for the diagnosis, treatment, and prevention of streptococcal infection.

L13 ANSWER 8 OF 13 USPATFULL

AN 2000:141891 USPATFULL
TI Bacterial plasmin receptors as fibrinolytic agents
IN Boyle, Michael D. P., Whitehouse, OH, United States
Lottenberg, Richard, Gainesville, FL, United States
Broder, Christopher, Rockville, MD, United States
Von Mering, Gregory, Gainesville, FL, United States
PA University of Florida Research Foundation, Inc., Gainesville, FL, United States (U.S. corporation)

PI US 6136323 20001024
AI US 1994-273247 19940711 (8)
RLI Division of Ser. No. US 1992-928462, filed on 10 Aug 1992, now patented, Pat. No. US 5328996 which is a continuation-in-part of Ser. No. US 1990-524411, filed on 16 May 1990, now patented, Pat. No. US 5237050 which is a continuation-in-part of Ser. No. US 1989-330849, filed on 29 Mar 1989, now abandoned
DT Utility
FS Granted
EXNAM Primary Examiner: Housel, James C.; Assistant Examiner: Ryan, V.
LREP Saliwanchik, Lloyd & Saliwanchik
CLMN Number of Claims: 1
ECL Exemplary Claim: 1
DRWN 1 Drawing Figure(s); 1 Drawing Page(s)
LN.CNT 1597

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The subject invention concerns novel methods and compositions for thrombolytic therapy. More specifically, a receptor with high affinity for plasmin has been characterized, purified, cloned, and expressed. This receptor can be used in combination therapies where it is administered prior to, concurrently with, or after a plasminogen activator. Also, this receptor can be bound to plasmin and administered to humans or animals in need of fibrinolytic activity. Additionally, the invention pertains to a novel immobilized form of plasmin which advantageously accumulates at the point where antifibrinolytic activity is needed.

L13 ANSWER 9 OF 13 USPATFULL

AN 1999:128379 USPATFULL
TI Method for screening inhibitors of the enzyme which cleaves the anchor of **surface proteins** from gram positive bacteria
IN Fischetti, Vincent A., West Hempstead, NY, United States
Pancholi, Vijaykumar, New York, NY, United States
PA The Rockefeller University, New York, NY, United States (U.S. corporation)
PI US 5968763 19991019
AI US 1997-819444 19970317 (8)
RLI Continuation-in-part of Ser. No. US 1994-319540, filed on 7 Oct 1994
DT Utility
FS Granted
EXNAM Primary Examiner: Weber, Jon P.
CLMN Number of Claims: 21
ECL Exemplary Claim: 1
DRWN 4 Drawing Figure(s); 4 Drawing Page(s)
LN.CNT 995

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention relates to an enzyme which cleaves **surface proteins** of gram-positive bacteria, to methods of detecting the enzyme, and methods of isolating the enzyme. In particular, the enzyme is isolated from a **group A Streptococcus**, and cleaves at the sequence LPXTGX (SEQ ID NO:1). A method for screening putative inhibitors of the enzyme which cleaves the anchor region of **surface proteins** from gram positive bacteria is also disclosed.

L13 ANSWER 10 OF 13 USPATFULL

AN 1999:65197 USPATFULL
TI DNA encoding fibronectin and fibrinogen binding protein from group A streptococci
IN Rocha, Claudia, New York, NY, United States
Fischetti, Vincent A., West Hempstead, NY, United States
PA The Rockefeller University, New York, NY, United States (U.S. corporation)

PI US 5910441 19990608
AI US 1996-714402 19960916 (8)
DT Utility
FS Granted
EXNAM Primary Examiner: Caputa, Anthony C.; Assistant Examiner: Navarro, Mark
LREP Burns, Doane, Swecker & Mathis, L.L.P.
CLMN Number of Claims: 11
ECL Exemplary Claim: 1
DRWN 5 Drawing Figure(s); 5 Drawing Page(s)
LN.CNT 959

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention relates to a novel fibrinogen and fibronectin binding protein from group A streptococci, and the DNA encoding the protein. The protein and its DNA are useful in the preparation of compositions for the diagnosis, treatment, and prevention of streptococcal infection.

L13 ANSWER 11 OF 13 USPATFULL

AN 1998:135155 USPATFULL
TI Bacterial receptor structures
IN Nilsson, Bjorn, Sollentuna, Sweden
Nygren, Per-ANG.ke, Skarpnack, Sweden
Uhlen, Mathias, Upsala, Sweden
PA Pharmacia & Upjohn Aktiebolag, Stockholm, Sweden (non-U.S. corporation)
PI US 5831012 19981103
WO 9519374 19950720
AI US 1996-669360 19960815 (8)
WO 1995-SE34 19950116
19960815 PCT 371 date
19960815 PCT 102(e) date

PRAI SE 1994-88 19940114

DT Utility

FS Granted

EXNAM Primary Examiner: Caputa, Anthony C.; Assistant Examiner: Masood, Khalid
LREP Burns, Doane, Swecker & Mathis, L.L.P.
CLMN Number of Claims: 3
ECL Exemplary Claim: 1
DRWN 22 Drawing Figure(s); 19 Drawing Page(s)
LN.CNT 1016

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Novel proteins obtainable by mutagenesis of surface-exposed amino acids of domains of natural bacterial receptors, said proteins being obtained without substantial loss of basic structure and stability of said natural bacterial receptors; proteins which have been selected from a protein library embodying a repertoire of said novel proteins; and methods for the manufacture of artificial bacterial receptor structures.

L13 ANSWER 12 OF 13 USPATFULL

AN 97:20384 USPATFULL
TI Virulence-encoding DNA sequences of Streptococcus suis and related products and methods
IN Smith, Hilda E., Cz Lelystad, Netherlands
Vecht, Uri, As Ermelo, Netherlands
PA Centraal Diergeneeskundig Instituut, PH Lelystad, Netherlands (non-U.S. corporation)
PI US 5610011 19970311
WO 9216630 19920110
AI US 1993-119125 19930920 (8)
WO 1992-NL54 19920319
19930920 PCT 371 date
19930920 PCT 102(e) date

PRAI NL 1991-510 19910321

DT Utility

FS Granted

EXNAM Primary Examiner: Campell, Bruce R.
LREP Handal & Morofsky
CLMN Number of Claims: 9
ECL Exemplary Claim: 1
DRWN 18 Drawing Figure(s); 13 Drawing Page(s)
LN.CNT 2515

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention provides DNA sequences which code for polypeptides which are characteristic for the virulence of the pathogenic bacterium *Streptococcus suis* and parts thereof, and polypeptides and antibodies derived therefrom. The sequences code for a polypeptide of 90,000-120,000 daltons or a polypeptide of higher molecular weight containing such a polypeptide, and for a polypeptide of 135,000-136,000 daltons (muramidase released protein), or parts thereof. The sequences themselves, and also the polypeptides and antibodies derived therefrom, are used for diagnosis of and protection against infection by *S. suis* in mammals, including man.

L13 ANSWER 13 OF 13 USPATFULL

AN 94:60245 USPATFULL

TI Bacterial plasmin receptors as fibrinolytic agents

IN Boyle, Michael D. P., Whitehouse, OH, United States

Lottenberg, Richard, Gainesville, FL, United States

Broder, Christopher, Rockville, MD, United States

Von Mering, Gregory, Gainesville, FL, United States

PA University of Florida Research Foundation, Inc., Gainesville, FL, United States (U.S. corporation)

PI US 5328996 19940712

AI US 1992-928462 19920810 (7)

RLI Continuation-in-part of Ser. No. US 1990-524411, filed on 16 May 1990, now patented, Pat. No. US 5237050 which is a continuation-in-part of Ser. No. US 1989-330849, filed on 29 Mar 1989, now abandoned

DT Utility

FS Granted

EXNAM Primary Examiner: Ziska, Suzanne E.

LREP Saliwanchik & Saliwanchik

CLMN Number of Claims: 2

ECL Exemplary Claim: 1

DRWN 1 Drawing Figure(s); 1 Drawing Page(s)

LN.CNT 1522

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The subject invention concerns novel methods and compositions for thrombolytic therapy. More specifically, a receptor with high affinity for plasmin has been characterized, purified, cloned, and expressed. This receptor can be used in combination therapies where it is administered prior to, concurrently with, or after a plasminogen activator. Also, this receptor can be bound to plasmin and administered to humans or animals in need of fibrinolytic activity. Additionally, the invention pertains to a novel immobilized form of plasmin which advantageously accumulates at the point where antifibrinolytic activity is needed.

=> d his

(FILE 'HOME' ENTERED AT 11:31:42 ON 22 NOV 2002)

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E BJORCK L/AU

=> s antibodies to alpha 2 macroglobulin or alpha 2M

11 FILES SEARCHED...

21 FILES SEARCHED...

30 FILES SEARCHED...

36 FILES SEARCHED...

45 FILES SEARCHED...

47 FILES SEARCHED...

56 FILES SEARCHED...

L2 4348 ANTIBODIES TO ALPHA 2 MACROGLOBULIN OR ALPHA 2M

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DRUGLAUNCH, DRUGMONOG2, DRUGUPDATES, FEDRIP, FOREGE, GENBANK, KOSMET,

MEDICONF, PHAR, PHARMAML, SYNTHLINE'.
ANSWERS FROM THESE FILES WILL BE CONSIDERED UNIQUE
PROCESSING IS APPROXIMATELY 47% COMPLETE FOR L2
PROCESSING IS APPROXIMATELY 87% COMPLETE FOR L2
PROCESSING COMPLETED FOR L2
L3 1596 DUP REM L2 (2752 DUPLICATES REMOVED)

=> s l3 and (streptococcus or S.pyogenes)
11 FILES SEARCHED...
21 FILES SEARCHED...
36 FILES SEARCHED...
52 FILES SEARCHED...
L4 16 L3 AND (STREPTOCOCCUS OR S.PYOGENES)

=> d bib ab 1-16 14
NO VALID FORMATS ENTERED FOR FILE 'GENBANK'
In a multifile environment, each file must have at least one valid
format requested. Refer to file specific help messages or the
STNGUIDE file for information on formats available in individual
files.
REENTER DISPLAY FORMAT FOR ALL FILES (FILEDEFAULT):filedefault

L4 ANSWER 1 OF 16 AGRICOLA
AN 97:2432 AGRICOLA
DN IND20539407
TI A protein G-related cell surface protein in **Streptococcus**
zooepidemicus.
AU Jonsson, H.; Lindmark, H.; Guss, B.
CS Swedish University of Agricultural Sciences, Uppsala, Sweden.
AV DNAL (QR1.I57)
SO Infection and immunity, Aug 1995. Vol. 63, No. 8. p. 2968-2975
Publisher: Washington, D.C., American Society for Microbiology
ISSN: 0019-9567
NTE Includes references
CY District of Columbia; United States
DT Article
FS U.S. Imprints not USDA, Experiment or Extension
LA English

L4 ANSWER 2 OF 16 AGRICOLA
AN 94:69988 AGRICOLA
DN IND20417788
TI MAG, a novel plasma protein receptor from **Streptococcus**
dysgalactiae.
AU Jonsson, H.; Frykberg, L.; Rantamaki, L.; Guss, B.
AV DNAL (QH442.A1G4)
SO Gene, 1994. Vol. 143, No. 1. p. 85-89
Publisher: Amsterdam : Elsevier Science Publishers.
CODEN: GENED6; ISSN: 0378-1119
NTE Includes references
CY Netherlands
DT Article
FS Non-U.S. Imprint other than FAO
LA English

L4 ANSWER 3 OF 16 BIOBUSINESS COPYRIGHT 2002 BIOSIS
AN 97:74281 BIOBUSINESS
DN 0931816
TI Shot-gun phage display mapping of two streptococcal cell-surface proteins.
AU Jacobsson K; Jonsson H; Lindmark H; Guss B; Lindberg M; Frykberg L
CS Dep. Microbiol., Swedish Univ. Agricultural Sciences, Box 7025, S-750 07
Uppsala, Sweden.
SO Microbiological Research, (1997) Vol.152, No.2, p.121-128.

ISSN: 0944-5013.

DT ARTICLE
FS NONUNIQUE
LA English

L4 ANSWER 4 OF 16 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
AN 1997:444283 BIOSIS
DN PREV199799743486
TI Shot-gun phage display mapping of two streptococcal cell-surface proteins.
AU Jacobsson, Karin; Jonsson, Hans; Lindmark, Hans; Guss, Bengt; Lindberg, Martin; Frykberg, Lars (1)
CS (1) Dep. Microbiol., Swedish Univ. Agricultural Sciences, Box 7025, S-750 07 Uppsala Sweden
SO Microbiological Research, (1997) Vol. 152, No. 2, pp. 121-128.
ISSN: 0944-5013.

DT Article
LA English

L4 ANSWER 5 OF 16 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
AN 1995:320334 BIOSIS
DN PREV199598334634
TI Streptococcal protein MAG-a protein with broad albumin binding specificity.
AU Jonsson, Hans; Burtsoff-Asp, Christina; Guss, Bengt (1)
CS (1) Dep. Microbiol., Swedish Univ. Agric. Sci., Box 7025, S-750 07 Uppsala Sweden
SO Biochimica et Biophysica Acta, (1995) Vol. 1249, No. 1, pp. 65-71.
ISSN: 0006-3002.

DT Article
LA English

L4 ANSWER 6 OF 16 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
AN 1987:424819 BIOSIS
DN BA84:91481
TI NOVEL COMPLEX FORMED BETWEEN A NONPROTEOLYTIC CELL WALL PROTEIN OF GROUP A STREPTOCOCCI AND ALPHA-2 MACROGLOBULIN.
AU CHHATWAL G S; ALBOHN G; BLOBEL H
CS INST. FUER BAKTERIOLOGIE UND IMMUNOL., JUSTUS-LIEBIG-UNIV., D-63000 GIESSEN, FEDERAL REPUBLIC OF GERMANY.
SO J BACTERIOL, (1987) 169 (8), 3691-3695.
CODEN: JOBAAY. ISSN: 0021-9193.

FS BA; OLD
LA English

L4 ANSWER 7 OF 16 CAPLUS COPYRIGHT 2002 ACS
AN 1999:349300 CAPLUS
DN 131:141811
TI Protein GRAB of *Streptococcus pyogenes* regulates proteolysis at the bacterial surface by binding .alpha.2-macroglobulin
AU Rasmussen, Magnus; Muller, Hans-Peter; Bjorck, Lars
CS Department of Cell and Molecular Biology, Section for Molecular Pathogenesis, Lund University, Lund, S-221 00, Swed.
SO Journal of Biological Chemistry (1999), 274(22), 15336-15344
CODEN: JBCHA3; ISSN: 0021-9258

PB American Society for Biochemistry and Molecular Biology
DT Journal
LA English

RE.CNT 48 THERE ARE 48 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 8 OF 16 CAPLUS COPYRIGHT 2002 ACS
AN 1990:550657 CAPLUS
DN 113:150657

TI Role of .alpha.2-macroglobulin in phagocytosis of group A and C streptococci
 AU Valentin-Weigand, Peter; Traore, Modibo Y.; Blobel, Hans; Chhatwal, Gursharan S.
 CS Inst. Bakteriolog. Immunol., Justus-Liebig-Univ., Giessen, Germany
 SO FEMS Microbiology Letters (1990), 70(3), 321-4
 CODEN: FMLED7; ISSN: 0378-1097
 DT Journal
 LA English

L4 ANSWER 9 OF 16 CAPLUS COPYRIGHT 2002 ACS
 AN 1986:440320 CAPLUS
 DN 105:40320
 TI Binding of human .alpha.2-macroglobulin to streptococci of group A, B, C and G
 AU Mueller, H. P.; Blobel, H.
 CS Inst. Bakteriolog. Immunol., Justus-Liebig-Univ., Giessen, 6300, Fed. Rep. Ger.
 SO Recent Adv. Streptococci Streptococcal Dis., Proc. Lancefield Int. Symp. Streptococci Streptococcal Dis., 9th (1985), Meeting Date 1984, 96-8.
 Editor(s): Kimura, Yoshitami; Kotani, Shozo; Shiokawa, Yuichi. Publisher: Reedbooks, Bracknell, UK.
 CODEN: 55BSAN
 DT Conference
 LA English

L4 ANSWER 10 OF 16 GENBANK.RTM. COPYRIGHT 2002

LOCUS (LOC): AE014157 GenBank (R)
 GenBank ACC. NO. (GBN): AE014157 AE014074
 GenBank VERSION (VER): AE014157.1 GI:21904768
 CAS REGISTRY NO. (RN): 442467-70-1
 SEQUENCE LENGTH (SQL): 51454
 MOLECULE TYPE (CI): DNA; linear
 DIVISION CODE (CI): Bacteria
 DATE (DATE): 19 Jul 2002
 DEFINITION (DEF): **Streptococcus** pyogenes MGAS315, section 22 of 37 of the complete genome.
 SOURCE: **Streptococcus** pyogenes MGAS315.
 ORGANISM (ORGN): **Streptococcus pyogenes MGAS315**
 Bacteria; Firmicutes; Lactobacillales; Streptococcaceae; **Streptococcus**

NUCLEIC ACID COUNT (NA): 15734 a 10645 c 9037 g 16038 t
 REFERENCE: 1 (bases 1 to 51454)
 AUTHOR (AU): Beres, S.B.; Sylva, G.L.; Barbian, K.D.; Lei, B.; Hoff, J.S.; Mammarella, N.D.; Liu, M.-Y.; Smoot, J.C.; Porcella, S.F.; Parkins, L.D.; McCormick, J.K.; Leung, D.Y.M.; Schlievert, P.M.; Musser, J.M.
 TITLE (TI): Genome sequence of a serotype M3 strain of group A **Streptococcus**: Phage-encoded toxins, the high-virulence phenotype, and clone emergence
 JOURNAL (SO): Proc. Natl. Acad. Sci. U.S.A., 99 (15), 10078-10083 (2002)

REFERENCE: 2 (bases 1 to 51454)
 AUTHOR (AU): Beres, S.B.; Sylva, G.L.; Barbian, K.D.; Lei, B.; Hoff, J.S.; Mammarella, N.D.; Liu, M.-Y.; Smoot, J.C.; Porcella, S.F.; Parkins, L.D.; McCormick, J.K.; Leung, D.Y.M.; Schlievert, P.M.; Musser, J.M.
 TITLE (TI): Direct Submission
 JOURNAL (SO): Submitted (14-JUN-2002) Laboratory of Human-Bacterial Pathogenesis, Rocky Mountain Laboratories, NIAID, NIH, 903 South Fourth St., Hamilton, MT 59840, USA

FEATURES (FEAT):

Feature Key	Location	Qualifier
source	1..51454	/organism="Streptococcus pyogenes MGAS315" /strain="MGAS315" /serotype="M3" /db-xref="taxon:198466" /note="group: A"
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CDS	complement(4662..7040)	/gene="inlA"
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		/transl-table=11
		/product="putative internalin A precursor"
		/protein-id="AAM79642.1"
		/db-xref="GI:21904772"
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CDS	7244..8185	/note="SpyM3-1036" /gene="birA" /note="best blastp hit: gb AAK34189.1 (AE006574) putative biotin operon repressor [Streptococcus pyogenes M1 GAS]" /codon-start=1 /transl-table=11 /product="putative biotin operon repressor" /protein-id="AAM79643.1" /db-xref="GI:21904773" /translation="MKTSEKIYQLLSQTDDFVSG EYLADQLSISRTSVWKSISLENQ GIQIDSLKHKGYRMVQGDILLPKTISQGLGMPVT YTPHSQSTQLDAKQGIEAHNSAPR LYLAPSQEAAGRLDRQFFSASTGGIYMSMYLKP NVFYADMPPYTMMVASSIVKAISR LTGIDTEIKWVNDIYLGNHKVAGILTEAITSVET GLITDVIIGVGLNFFVTDFPEAIA QKAGSLFTEKPTITRNDLIIDIWKLFLSIPVKDH VKVYKEKSLVLNKQVTFIENSQEK RAIAIDLTDQGLHIVQFENGDLQTLRSGEISLSS WEN"
gene	complement(8160..8444)	/gene="SpyM3-1037"
CDS	complement(8160..8444)	/gene="SpyM3-1037" /note="best non-GAS blastp hit: gb AAK74993.1 (AE007392) hypothetical protein [Streptococcus pneumoniae TIGR4], and gb AAK99574.1 (AE008452) hypothetical protein [Streptococcus pneumoniae R6]" /codon-start=1 /transl-table=11 /product="conserved hypothetical protein" /protein-id="AAM79644.1" /db-xref="GI:21904774" /translation="MGKVLPLPTFYLVTFHSTV FFCYNKAMTIRQFLFMAFVCAFET YFFNDLLLSGNYLFALFWGLLLFRDLRRVHTINQ LTKTILKTANSPKKKD"
gene	complement(8448..10118)	/gene="dnaX"
CDS	complement(8448..10118)	/note="SpyM3-1038" /gene="dnaX" /note="best blastp hit: gb AAL97971.1 (AE010058) DNA polymerase III gamma/tau subunits [Streptococcus pyogenes MGAS8232]" /codon-start=1 /transl-table=11 /product="DNA polymerase III gamma/tau subunits" /protein-id="AAM79645.1" /db-xref="GI:21904775"


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CDS       complement(10118..10681 /gene="SpyM3-1039"
)

/note="best non-GAS blastp hit:
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(AE006448) hypothetical protein
[Lactococcus lactis subsp.
lactis]"
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protein"
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gene      10760..11569 /gene="SpyM3-1040"
CDS       10760..11569 /gene="SpyM3-1040"

/note="best non-GAS blastp hit:
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hypothetical protein
[Streptococcus pneumoniae R6]"
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protein"
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TLFPRLTLKEKLVVALLSGMGFQL
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CDS       complement(11622..11885 /gene="SpyM3-1041"
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          /note="best non-GAS blastp hit:
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          conserved hypothetical protein
          [Streptococcus pneumoniae TIGR4]"
          /codon-start=1
          /transl-table=11
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          protein"
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gene      complement(11965..12591 /gene="udk"
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CDS       complement(11965..12591 /gene="udk"
)
          /note="SpyM3-1042"

          /note="best blastp hit:
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          (Uridine monophosphokinase)
          (Cytidine monophosphokinase), and
          gb|AAK34195.1| (AE006574) putative
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          pyogenes M1 GAS]"
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          /protein-id="AAM79649.1"
          /db-xref="GI:21904779"
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          DPQDVIIIEGILVLEDERLRDLMDIKLFVDTDDD
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          DVINSKIASILGEV"

gene      12689..13774
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CDS       12689..13774
          /note="SpyM3-1043"
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          /note="best blastp hit:
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          RNA helicase [Streptococcus
          pyogenes MGAS8232]"
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          TSQKRQIERLKKGPEILIGTPGRIFELIKLKKIK
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gene      complement(13884..15158 /gene="SpyM3-1044"
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CDS       complement(13884..15158 /gene="SpyM3-1044"
)

/note="best non-GAS blastp hit:
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Peptidoglycan GlcNAc deacetylase
[Streptococcus pneumoniae R6]"
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FLANS DRAAYDNYRTYKEQHPKKLVALTFDDGPD
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SKVVNNENLTKRVS DAGHEIANHTWDHPNLTNLS
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YLRPPYGATNATVQQSSGLTQMLWTVDRDWENH
STDGIMTNVKNQLQPGGVLMHDI
HQT TINALPTVMEYLKAEGYECVTVSELYAHQ"
gene      complement(15253..16656 /gene="gapN"
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CDS       complement(15253..16656 /gene="gapN"
)

/note="SpyM3-1045"
/note="best blastp hit:
gb|AAL97978.1| (AE010058) putative
NADP-dependent
glyceraldehyde-3-phosphate
dehydrogenase [Streptococcus
pyogenes MGAS8232]"
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glyceraldehyde-3-phosphate
dehydrogenase"
/protein-id="AAM79652.1"
/db-xref="GI:21904782"
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GLVLAI SPFNYPVNLGSKIAPAL
IAGNVVALKPPTQGSISGLLLAEFAEAGIPAGV
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)
/note="SpyM3-1046"
CDS      complement(16865..18589 /gene="ptsI"
)
/note="best blastp hit:
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phosphotransferase system enzyme I
[Streptococcus pyogenes M1 GAS],
and gb|AAL97979.1| (AE010058)
putative phosphoenolpyruvate:sugar
PTS enzyme I [Streptococcus
pyogenes MGAS8232]"
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VNGITGEVIIDPSEDQVLAFKEAGAAYAKQKA EW
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SIGTNDLIQYTMADRMNEQVSYLYQPYNPSILR
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gene      complement(18603..18866 /gene="ptsH"
)
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/note="SpyM3-1047"
CDS      complement(18603..18866 /gene="ptsH"
)
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Phosphocarrier protein HPr
(Histidine-containing protein),
and prf||2120381A ptsH gene
[Streptococcus salivarius]"
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/transl-table=11
/product="putative

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		phosphotransferase system phosphohistidine-containing protein"
		/protein-id="AAM79654.1"
		/db-xref="GI:21904784"
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gene	19226..19477	/gene="nrdH"
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CDS	19226..19477	/gene="nrdH"
		/note="best blastp hit: gb AAK34201.1 (AE006575) putative glutaredoxin [Streptococcus pyogenes M1 GAS], involved in electron transport system for ribonucleotide reductase system"
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gene	19497..21656	/gene="nrdE.1"
		/note="SpyM3-1049"
CDS	19497..21656	/gene="nrdE.1"
		/note="best blastp hit: gb AAL97982.1 (AE010059) putative ribonucleotide reductase alpha-chain [Streptococcus pyogenes MGAS8232]"
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		/transl-table=11
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		/protein-id="AAM79656.1"
		/db-xref="GI:21904786"
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gene	21989..22948	KDGLYHQNRLAVAPNGSISYINDCSASIHPIQ IEERQEKKIGKIYYPANGLSTDTI PYYTSAYDMDMRKVIDVYAAATEHVDQGLSLTLF LRSELPMELEYEWKTQSKQTTRDLS ILRNYAFNKGIKSIYYIRTFTDDGEEVGANQCES CVI" /gene="nrdF.1" /note="SpyM3-1050"
CDS	21989..22948	/gene="nrdF.1" /note="best blastp hit: gb AAK34203.1 (AE006575) ribonucleotide diphosphate reductase small subunit [Streptococcus pyogenes M1 GAS]" /codon-start=1 /transl-table=11 /product="putative ribonucleoside-diphosphate reductase 2 beta subunit" /protein-id="AAM79657.1" /db-xref="GI:21904787" /translation="MTTYEAINWNEIEDVIDKS TWEKLTEQFWLDTRIPLSNDLDDW RKLSLQEKDLVGKVFGLTLLDTMQSETGVEAIR ADVRTPHEEAVLNNIQFMESVHAK SYSSIFSTLNTKKEIEEIFEWTNNNEFLQEKARI INDIYANGDALQKKVASTYLETFL FYSGFFTPLYYLGNNKLANVAEIIKLIIRDES VHYIGYKFGFNLPEDEQENFR DWMYDLLYQLYENEEKYTKTLYDGVGWTEEVMTF LRYNANKALMNLGQDPLFPDTAND VNPVIMNGISTGTSNHDFFSQVNGYLLGSVEAM SDDDYNYGL" /gene="SpyM3-1051" /gene="SpyM3-1051" /note="best blastp hit: gb AAL97984.1 (AE010059) putative chloride channel protein [Streptococcus pyogenes MGAS8232]; similar to EriC of Corynebacterium glutamicum" /codon-start=1 /transl-table=11 /product="putative chloride channel protein" /protein-id="AAM79658.1" /db-xref="GI:21904788" /translation="MTIIIMDSNSAHETDNLVS FLNFCYNLSMKRHFLLLTFFYLFLT GLTAGLVAFILTKAIHLIQSLSFQGSFSTMI ASVPPQRRALSLLFAGLLAGLGWH LLAKKGKDIQSIQQIIQDDISFPWTQFWHGWLQ LTTVSMGAPVGREGASREVAVALT SLWSQRCNLSKADQKLLACASGAALGAVYNAPL ATILFILEAILNRWSLKNIYAACL TSYVAVATVALLQGRHEIQYLMPQQHWTLGTLIW SVLAGLILSLFAHAYKHLLLEHLPK ADAKSQWLPKVLIAFSLIAGLSIFFPEILGNGK AGLLFFLHEEPHLSYISWLLVAKA VAISLVFASGAKGGKIAPSMMLGGASGLLLAILS QYLIPLSLSNTLAIMVGATIFLGV INKIPLAAPVFLVEITGQSLLMIPLALANLIFY FSYQFYRFILK"
gene	22923..24236	
CDS	22923..24236	

gene	24374..24667	/gene="SpyM3-1052"
CDS	24374..24667	/gene="SpyM3-1052"
		/note="N-terminal portion; blastp hit: pir S14450 probable transposase - Lactococcus lactis subsp. lactis insertion sequence IS1076; possible pseudogene aligns with N-terminal portion of transposase"
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		/transl-table=11
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		/protein-id="AAM79659.1"
		/db-xref="GI:21904789"
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gene	24700..24996	/gene="SpyM3-1053"
CDS	24700..24996	/gene="SpyM3-1053"
		/note="central portion; blastp hit: emb CAA55219.1 (X78469) orfA; orfA and orfB are possibly translated as one large transposase protein through a frameshift motif [Lactococcus lactis], possible pseudogene aligns with central portion of transposase"
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CDS	25099..25524	/gene="SpyM3-1054"
		/note="C-terminal portion; best blastp hit: emb CAA55220.1 (X78469) orfB; orfA and orfB are possibly translated as one large transposase protein through a frameshift motif [Lactococcus lactis]; possible pseudogene aligns with C-terminal portion of transposase"
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gene	complement(25621..26316	/gene="SpyM3-1055"
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CDS	complement(25621..26316	/gene="SpyM3-1055"

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/
/note="best non-GAS blastp hit:
dbj|BAB43118.1| (AP003135)
conserved hypothetical protein
[Staphylococcus aureus subsp.
aureus N315], and dbj|BAB58193.1|
(AP003364) conserved hypothetical
protein [Staphylococcus aureus
subsp. aureus Mu50]"
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WSGQQVSANDAAIHTLARLIKGGFPLYTALFVLV
IAFIAPIMEELVFRGFPIDLFKG
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gene      complement(26335..27096 /gene="SpyM3-1056"
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CDS      complement(26335..27096 /gene="SpyM3-1056"
)

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hypothetical protein
[Streptococcus pneumoniae TIGR4]"
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TIPLLDILLLLMVIPFQALAMKCY
NAIRGTDVPYFPNLKELKHNNIMALDEAELQAYHK
TSFESVLSLNGVLIIPSLYVILFFV
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R"
gene      complement(27093..27308 /gene="SpyM3-1057"
)
CDS      complement(27093..27308 /gene="SpyM3-1057"
)

/
/note="best blastp hit:
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[Streptococcus pyogenes M1 GAS];
similar to transcriptional
repressor"
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regulator protein"
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gene      complement(27667..30144 /gene="alaS"
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        /note="SpyM3-1058"
CDS      complement(27667..30144 /gene="alaS"
)
        /note="best blastp hit:
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        synthetase (Alanine--tRNA ligase)
        (AlaRS), and gb|AAK34208.1|
        (AE006576) putative alanyl-tRNA
        synthetase [Streptococcus pyogenes
        M1 GAS]"
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        LVPIEDNFWIEGAGPSGPDTEIFFDRGEDFDPEN
        IGLRLLAEDIENDRYIEIWNIVLS
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        QGAKTNFETDLFMPPIIREVEKLSG
        KTYDPDGDNMSFKVIADHIRALSFAIGDGALPGN
        EGRGYVLRRLRRRAVMHGRRRLGIN
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gene      complement(30672..31727 /gene="prtM.1"
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CDS      complement(30672..31727 /gene="prtM.1"
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AKSVLEELKAEGADFTAIKEKTTTPEKKVTYKF
DSGATNVPTDVVKAASSLNEGGIS
DVISVLDPTSYQKKFYIVKVTKKAEEKSDWQEYK
KRLKAIIEAKSKDMNFQNKVIAN
ALDKANVKIKDKAFANILAQYANLGQKTKAASES
STTSESSKAAEENPSESEQTQTSS
AEEPTEEAQTQEPAAQ"
gene      complement(31790..32422 /gene="SpyM3-1060"
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CDS       complement(31790..32422 /gene="SpyM3-1060"
)

/ note="best non-GAS blastp hit:
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O-methyltransferase [Streptococcus
pneumoniae TIGR4]"
/ codon-start=1
/ transl-table=11
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O-methyltransferase"
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/ db-xref="GI:21904797"
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GLLMIRKNQADIVLPD"
gene      complement(32563..33759 /gene="SpyM3-1061"
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CDS       complement(32563..33759 /gene="SpyM3-1061"
)

/ note="best blastp hit:
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oxalate:formate antiporter
[Streptococcus pyogenes M1 GAS],
and gb|AAL97993.1| (AE010060)
putative oxalateformate antiporter
[Streptococcus pyogenes MGAS8232]"
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antiporter"
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CDS      complement(34135..35940 /gene="pepB"
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pyogenes M1 GAS]"
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competence protein CoiA
[Streptococcus pneumoniae TIGR4]"
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16S pseudouridylate synthetase
[Streptococcus pyogenes MGAS8232]"
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gene      complement(38047..38751 /gene="nagB"
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CDS       complement(38047..38751 /gene="nagB"
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isomerase [Streptococcus pyogenes
MGAS8232]"
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GTSFEEETHVVDLQESTIEANSRF
FTSIEDVPKQAI SMGIASIMKSKMIVLLAFGQEK
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gene      38953..39981 /gene="queA"
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S-adenosylmethionine-tRNA
ribosyltransferase-isomerase
[Streptococcus pyogenes MGAS8232]"
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gene	39988..41208	
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gene	complement(41322..41912)	/gene="SpyM3-1068"
CDS	complement(41322..41912)	<pre> /gene="SpyM3-1068" /note="best non-GAS blastp hit: sp Q59514 BLA1-MORCA BETA-LACTAMASE BRO-1 PRECURSOR (PENICILLINASE), and gb AAA92126.1 (U49269) beta-lactamase BRO-1 [Moraxella catarrhalis]" /codon-start=1 /transl-table=11 /product="hypothetical protein" /protein-id="AAM79675.1" /db-xref="GI:21904805" /translation="MTERFDITETDYEYDQEHHA YVAQFNGAMSIPDMQEYSLVCSN TPAYALAERLGGMNKAYQLFDYRGKVGAIITID RNGNKITTAYYLQVLDYLVQHQDK </pre>

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gene      complement(41909..42157 /gene="SpyM3-1069"
)
CDS      complement(41909..42157 /gene="SpyM3-1069"
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                                proteinase [Lactobacillus
                                helveticus]"
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)
CDS      complement(42142..42369 /gene="SpyM3-1070"
)
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gene      complement(46573..47235 /gene="comEA"
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CDS      complement(46573..47235 /gene="comEA"
)
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pyogenes M1 GAS], and
gb|AAL98006.1| (AE010061) putative
competence protein [Streptococcus
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pyogenes M1 GAS]"
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gene      48215..49069 /gene="SpyM3-1076"
CDS      48215..49069 /gene="SpyM3-1076"
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conserved hypothetical protein
[Streptococcus pneumoniae TIGR4]"
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gene	49059..49337	
CDS	49059..49337	
gene	complement(49361..51361)	
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1081	gcaactaatc	caaaagctga	tctacgcaaa	aagtatttca	cttttatttc	ttttcccatt
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1681	acggcccttg	ataaacaatc	tgaccacca	taactgagat	atctgctccc	atgcgcacat
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1801	ctgcttttaa	caacaagggc	gttaatggct	gttgcaaact	agtggcaaag	ccagggttaag
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L4 ANSWER 11 OF 16

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GenBank VERSION (VER): AE006573.1 GI:13622459
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MOLECULE TYPE (CI): DNA; linear
DIVISION CODE (CI): Bacteria
DATE (DATE): 1 Jun 2001
DEFINITION (DEF): Streptococcus pyogenes M1 GAS strain SF370,
section 102 of 167 of the complete genome.
SOURCE: Streptococcus pyogenes M1 GAS.
ORGANISM (ORGN): Streptococcus pyogenes M1 GAS

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Bacteria; Firmicutes; Bacillus/Clostridium group;
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Streptococcus

NUCLEIC ACID COUNT (NA): 3029 a 2125 c 1632 g 3243 t

REFERENCE: 1 (bases 1 to 10029)

AUTHOR (AU): Ferretti, J.J.; McShan, W.M.; Adjic, D.; Savic, D.;
 Savic, G.; Lyon, K.; Primeaux, C.; Sezate, S.S.;
 Surorov, A.N.; Kenton, S.; Lai, H.; Lin, S.; Qian, Y.;
 Jia, H.G.; Najjar, F.Z.; Ren, Q.; Zhu, H.; Song, L.;
 White, J.; Yuan, X.; Clifton, S.W.; Roe, B.A.;
 McLaughlin, R.E.

TITLE (TI): Complete genome sequence of an M1 strain of
Streptococcus pyogenes

JOURNAL (SO): Proc. Natl. Acad. Sci. U.S.A., 98 (8), 4658-4663 (2001)
 OTHER SOURCE (OS): CA 134:306044

REFERENCE: 2 (bases 1 to 10029)

AUTHOR (AU): Ferretti, J.J.; McShan, W.M.; Adjic, D.; Savic, D.;
 Savic, G.; Lyon, K.; Primeaux, C.; Sezate, S.S.;
 Surorov, A.N.; Kenton, S.; Lai, H.; Lin, S.; Qian, Y.;
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 White, J.; Yuan, X.; Clifton, S.W.; Roe, B.A.;
 McLaughlin, R.E.

TITLE (TI): Direct Submission

JOURNAL (SO): Submitted (10-APR-2001) Department of Microbiology and
 Immunology, University of Oklahoma Health Sciences
 Center, 940 SL Young Blvd, Oklahoma City, OK 73104, USA

FEATURES (FEAT):

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 9961 gtttttagcca tttaggtgcc attcttttca ctcattatcc tatttttttc aaaaaaacct
 10021 caaggttat

L4 ANSWER 12 OF 16 IFIPAT COPYRIGHT 2002 IFI
 AN 10117699 IFIPAT;IFIUDB;IFICDB
 TI STREPTOCOCCAL ALPHA 2M BINDING PROTEIN
 IN Bjorck Lars (SE); Rassmussen Magnus (SE)
 PA Unassigned Or Assigned To Individual (68000)
 PI US 2002061306 AI 20020523
 AI US 2001-847539 20010501
 PRAI GB 1998-239759 19981102
 FI US 2002061306 20020523
 DT Utility; Patent Application - First Publication
 FS CHEMICAL
 APPLICATION
 CLMN 22
 GI 11 Figure(s).
 FIG. 1. The binding of radiolabeled alpha 2M to 109
 bacteria of different strains of *S. pyogenes* grown to

early stationary phase is presented in A (bars represent +SEM, n=3). In B the binding of radiolabeled **alpha 2M** to 2×10^8 KTL3 bacteria was competed with **alpha 2M** and with protein G (+/-SD, n=3). In C the scatchard plot for the reaction between **alpha 2M** and 109 KTL3 bacteria is shown. The shape of the plot suggests two binding sites with different affinities ($K_a=2.0 \times 10^8 M^{-1}$ and $5.3 \times 10^6 M^{-1}$ respectively).

FIG. 2. A schematic comparison between protein GRAB and protein G is shown in A. The complete nucleotide and amino acid sequence of grab/protein GRAB is shown in B.

FIG. 3. Different strains of *S. pyogenes* were subjected to PCR and the results are set out in (A). From all strains, except from the AP9 strain, a product of between 500 and 850 bp in size could be amplified (A). Schematic comparison of the mature protein GRAB (amino acids 34-188 in FIG. 2B) encoded by these strains is shown in B.

FIG. 4. MBP-GRAB was used to inhibit the binding of radiolabeled **alpha 2M** to 2×10^8 KTL3 bacteria. Similarly one synthetic peptide (aa 34-56 in FIG. 2B) was able to compete for the binding of **alpha 2M** although less efficiency than MBP-GRAB, while an overlapping peptide (aa 51-68 in FIG. 2B) did not compete for the binding. Bars represent +/-SD, n=3.

FIG. 5. An internal fragment of grab, lacking the part of the gene coding for the cell wall attachment, was cloned into the streptococcal suicide plasmid pFW13 to generate FW-grab. pFWgrab was transformed into KTL3 bacteria, to generate MR4. MR4 was completely devoid of **alpha 2M** binding as shown (+SD, n=3).

FIG. 6. The binding of the radiolabeled fibrinogen was measured after trypsin treatment of KTL3 or MR4 bacteria. Some bacteria were preincubated with **alpha 2M** (+ **alpha 2M**) and some were not. As can be seen, preincubation of KTL3 with **alpha 2M** protected the M protein, and thus fibrinogen binding, from trypsin degradation. **alpha 2M** pretreatment of MR4 did not affect the fibrinogen binding (+SD n=3).

FIG. 7. Radiolabeled and activated SCP was added to KTL3 (1), MR4 (3), or the same bacteria preincubated with **alpha 2M** (2 and 4 respectively). The binding of SCP was significantly higher to KTL3 bacteria that had been preincubated with **alpha 2M** (+SD, n=3).

FIG. 8. Shows the results of an assay of sheep anti-DSP 18. peptide sera on a GRAB coated plate.

FIG. 9. Shows the results of ELISA using

FIG. 10. Shows the serum antibody response in mice immunised with a protein or peptide of the invention.

FIG. 11. Shows the results of opsonization of log phase group A *streptococcus* by sera to a protein or peptide of the invention.

L4 ANSWER 13 OF 16 IFIPAT COPYRIGHT 2002 IFI
 AN 3364897 IFIPAT;IFIUDB;IFICDB
 TI DNA ENCODING F **ALPHA-2M**-BINDING PROTEIN AND PROTEIN
 ENCODED THEREBY; DNA ISOLATED FROM **STREPTOCOCCUS** CELLS WHICH
 ENCODES A SURFACE PROTEIN CAPABLE OF BINDING A PLASMA PROTEINASE
 INHIBITOR; FOR AFFINITY PURIFICATION AND DIAGNOSTIC TESTS
 IN Guss Bengt (SE); Jonsson Hans (SE); Lindberg Martin (SE); Mueller
 Hans-Peter (SE); Rantamaki Liisa K (FI)
 PA Unassigned Or Assigned To Individual (68000)
 PI US 6100055 20000808
 WO 9507296 19950316
 AI US 1996-669408 19960703
 WO 1994-SE826 19940906
 19960703 PCT 371 date
 19960703 PCT 102(e) date
 PRAI SE 1993-2855 19930906
 FI US 6100055 20000808

DT UTILITY
FS CHEMICAL
GRANTED
CLMN 28
GI 12 Drawing Sheet(s), 8 Figure(s).

L4 ANSWER 14 OF 16 MEDLINE
AN 91032903 MEDLINE
DN 91032903 PubMed ID: 1699839
TI Role of alpha 2-macroglobulin in phagocytosis of group A and C streptococci.
AU Valentin-Weigand P; Traore M Y; Blobel H; Chhatwal G S
CS Institut fur Bakteriologie und Immunologie, Justus-Liebig-Universitat, Giessen, F.R.G.
SO FEMS MICROBIOLOGY LETTERS, (1990 Aug) 58 (3) 321-4.
Journal code: 7705721. ISSN: 0378-1097.
CY Netherlands
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199012
ED Entered STN: 19910208
Last Updated on STN: 19960129
Entered Medline: 19901221

L4 ANSWER 15 OF 16 USPATFULL
AN 2002:213736 USPATFULL
TI Neutrokin-alpha and Neutrokin-alpha splice variant
IN Yu, Guo-Liang, Berkeley, CA, UNITED STATES
Ebner, Reinhard, Gaithersburg, MD, UNITED STATES
Ni, Jian, Germantown, MD, UNITED STATES
Rosen, Craig A., Laytonsville, MD, UNITED STATES
Ullrich, Stephen, Rockville, MD, UNITED STATES
PA Human Genome Sciences, Inc., Rockville, MD, UNITED STATES, 20850 (U.S. corporation)
PI US 2002115112 A1 20020822
AI US 2001-929493 A1 20010815 (9)
RLI Continuation-in-part of Ser. No. US 2000-588947, filed on 8 Jun 2000, PENDING Continuation-in-part of Ser. No. US 2000-589285, filed on 8 Jun 2000, PENDING Continuation-in-part of Ser. No. US 2000-589286, filed on 8 Jun 2000, PENDING Continuation-in-part of Ser. No. US 2000-589287, filed on 8 Jun 2000, PENDING Continuation-in-part of Ser. No. US 2000-586288, filed on 2 Jun 2000, PATENTED Continuation-in-part of Ser. No. US 2000-507968, filed on 22 Feb 2000, PENDING Continuation-in-part of Ser. No. US 1999-255794, filed on 23 Feb 1999, PENDING Continuation-in-part of Ser. No. US 1999-255794, filed on 23 Feb 1999, PENDING
PRAI US 2000-225628P 20000815 (60)
US 2000-227008P 20000823 (60)
US 2000-234338P 20000922 (60)
US 2000-240806P 20001017 (60)
US 2000-250020P 20001130 (60)
US 2001-276248P 20010316 (60)
US 2001-293499P 20010525 (60)
US 2001-296122P 20010607 (60)
US 2001-304809P 20010713 (60)
US 1999-122388P 19990302 (60)
US 1999-124097P 19990312 (60)
US 1999-126599P 19990326 (60)
US 1999-127598P 19990402 (60)
US 1999-130412P 19990416 (60)
US 1999-130696P 19990423 (60)
US 1999-131278P 19990427 (60)

US 1999-131673P 19990429 (60)
 US 1999-136784P 19990528 (60)
 US 1999-142659P 19990706 (60)
 US 1999-145824P 19990727 (60)
 US 1999-167239P 19991124 (60)
 US 1999-168624P 19991203 (60)
 US 1999-171108P 19991216 (60)
 US 1999-171626P 19991223 (60)
 US 2000-176015P 20000114 (60)
 DT Utility
 FS APPLICATION
 LN.CNT 18178
 INCL INCLM: 435/007.200
 INCLS: 530/388.230; 424/145.100
 NCL NCLM: 435/007.200
 NCLS: 530/388.230; 424/145.100
 IC [7]
 ICM: C07K016-24
 ICS: G01N033-567; G01N033-53; A61K039-395
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

 L4 ANSWER 16 OF 16 WPIDS (C) 2002 THOMSON DERWENT
 AN 2000-365572 [31] WPIDS
 DNC C2000-110434
 TI New alpha2M binding protein for generating a protective immune response to
 group A **streptococcus** and purifying the binding protein.
 DC B04 D16
 IN BJORCK, L H; RASMUSSEN, M; BJORCK, L; RASMUSSEN, M
 PA (ACTI-N) ACTINOVA LTD; (BJOR-I) BJORCK L; (RASS-I) RASMUSSEN M
 CYC 91
 PI WO 2000026240 A2 20000511 (200031)* EN 67p C07K014-00
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 OA PT SD SE SL SZ TZ UG ZW
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 FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS
 LT LU LV MA MD MG MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL
 TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
 AU 2000010572 A 20000522 (200040) C07K014-00
 EP 1144442 A2 20011017 (200169) EN C07K014-00
 R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT
 RO SE SI
 US 2002061306 A1 20020523 (200239) A61K039-40
 JP 2002528112 W 20020903 (200273) 77p C12N015-09
 ADT WO 2000026240 A2 WO 1999-GB3631 19991102; AU 2000010572 A AU 2000-10572
 19991102; EP 1144442 A2 EP 1999-954134 19991102, WO 1999-GB3631 19991102;
 US 2002061306 A1 Cont of WO 1999-GB3631 19991102, US 2001-847539 20010501;
 JP 2002528112 W WO 1999-GB3631 19991102, JP 2000-579627 19991102
 FDT AU 2000010572 A Based on WO 200026240; EP 1144442 A2 Based on WO
 200026240; JP 2002528112 W Based on WO 200026240
 PRAI GB 1998-23975 19981102
 IC ICM A61K039-40; C07K014-00; C12N015-09
 ICS A61K039-09; A61K039-395; A61P031-04; C07H021-04; C07K014-315;
 C07K016-12; C12N001-15; C12N001-19; C12N001-21; C12N005-10;
 C12P021-02

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LOGOFF? (Y)/N/HOLD:y

STN INTERNATIONAL LOGOFF AT 08:10:07 ON 03 DEC 2002